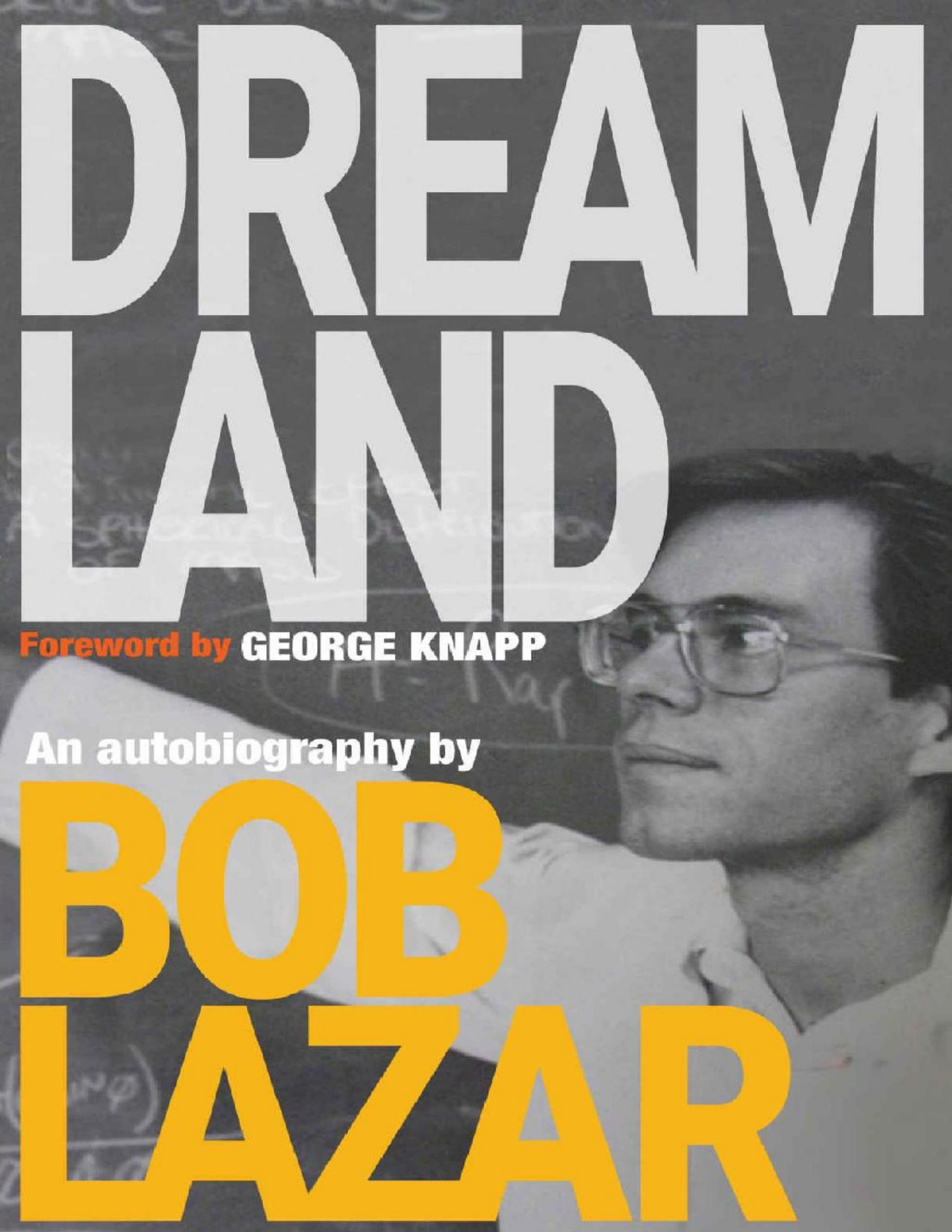
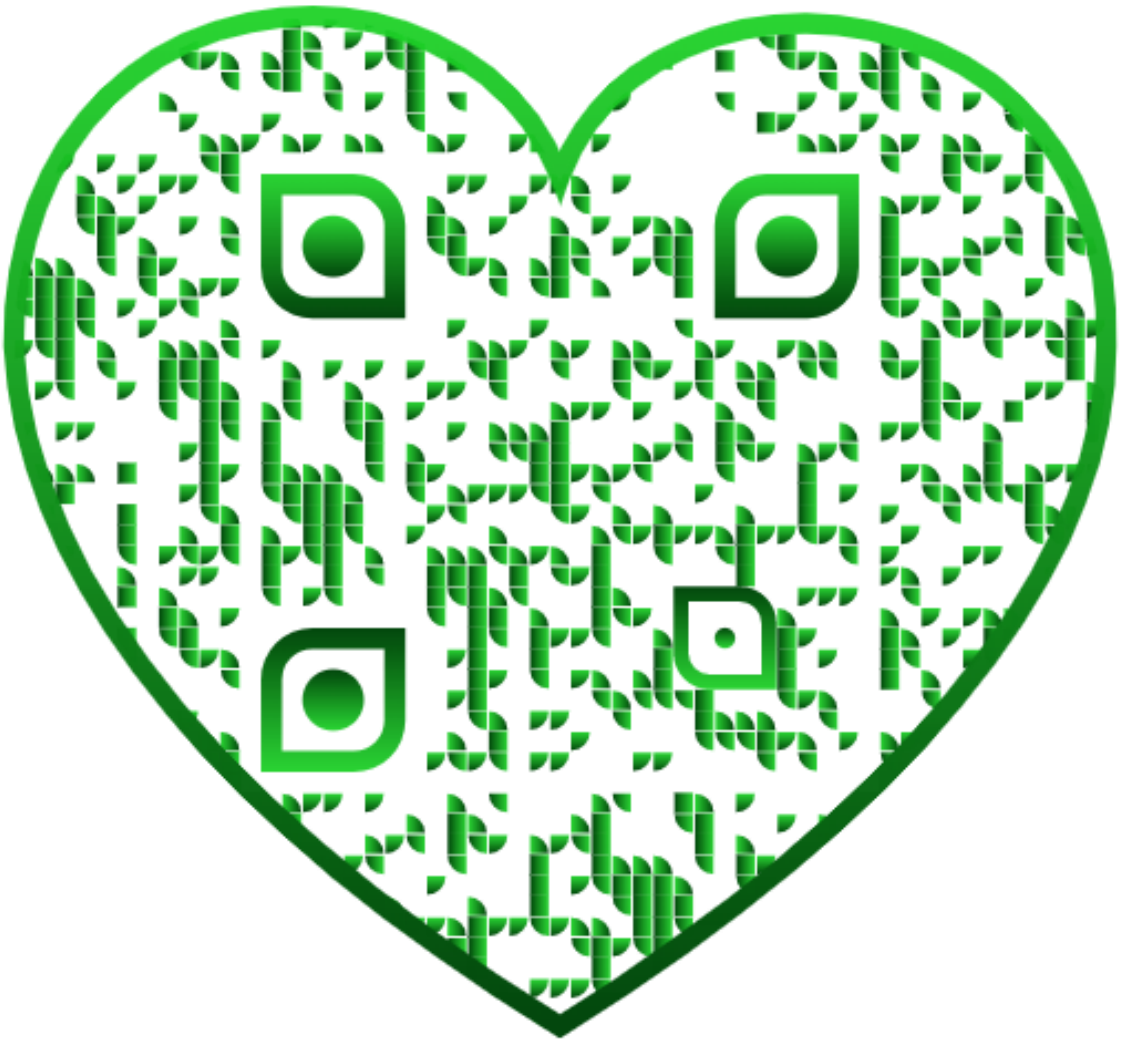
DREAM LAND

Foreword by GEORGE KNAPP

An autobiography by

BOB LAZAR





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FOREWORD

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IN THE DECADES SINCE BOB LAZAR FIRST STEPPED FORward, Area 51 has morphed into an almost humorous contradiction. It is by far the best known

“secret” base in the world. Whether this contradiction is good or bad, Lazar is the person most responsible for it. His tale changed an otherwise obscure outpost in the Nevada desert into a rock star of military facilities.

Since Lazar’s story rst exploded into the public consciousness in 1989, Area 51 has been catapulted to the forefront of UFO lore, along with the Roswel crash, Kenneth Arnold’s sightings, the abductions of Betty and Barney and Travis Walton. It has inspired several movies, documentaries, books, thousands of magazine and newspaper articles, heated debates at UFO

conferences and in online UFO social media forums, cartoons, and columns. It prompted the State of Nevada to create and christen the nation’s only Extraterrestrial Highway; became the theme and namesake of a Triple A basebal team and a couple of roadhouse bars; and was adapted into rock songs, rock bands, poems, video games, posters, tee shirts, trinkets, shot glasses, key chains, snow globes, Christmas ornaments, viewer’s guides, reworks, jerky kiosks, and countless comedy routines. It is likely the only military base in the world to become the theme for a legal bordel o and is also an interactive attraction in a Smithsonian-affiliated national museum. It is permanently perched in the pantheon of UFO holies, a god among lesser deities, much to the chagrin of UFO poobahs whose fervent protestations about Lazar have largely fal en on deaf ears.

A handful of revisionist writers have tried to defend some of the biggest, most self-serving lies told about Area 51, weakly arguing that it was never a secret base, was never al that classi ed, and isn’t real y a big deal. 劒is is disingenuous hair-splitting at best, and deserves a spot in your mental ling cabinet under the letters B and S.

It is true that on May 18, 1955, a news release was issued by the Atomic Energy Commission announcing that “preliminary work” had begun “on a smal satel ite instal ation” within the Las Vegas Bombing and Gunnery Range.

ﬀe construction wil be “essential y temporary,” the AEC claimed. ﬀat isn’t how it worked out.

ﬀe statement was sent to eighteen news organizations, including my future employer KLAS-TV. In the months that fol owed, other details were shared in terse news releases, indicating the AEC’s contractor was adding some “limited additional facilities and modi cations” to a smal instal ation near Groom Lake. In documents made public many years later, the AEC and its contractors referred to the location as Watertown, or the Watertown Strip. Government spokespersons said Watertown would be the hub of a program to obtain high altitude weather data for the Air Force, but the government wasn’t being honest, and it wouldn’t be the last lie that would be told about the base.

Watertown, the Watertown Strip, Paradise Ranch, the Box, Groom Lake, and Dreamland are names used over the ensuing decades to describe the enigmatic operation in the northeast corner of what was once known as the Nevada Test Site. ﬀe most common name for the once-tiny outpost though, the name that is now known al over the planet, is Area 51.

ﬀe cover stories issued by various authorities proved to be wildly inaccurate. ﬀe facility was built to house the U-2 spy plane, the most highly classi ed program of its day. U-2 ights did col ect weather data, but their primary mission was to spy on America’s adversaries. ﬀe smal , temporary facility wasn’t temporary at al . Today it is a sprawling complex that employs close to 2,000 scientists, technicians, pilots, radar specialists, contractors, security personnel, and assorted spooks from the world of military intel igence.

It is accurate to say the base’s existence wasn’t entirely a secret. I obtained a pair of phone books from the old AEC era, and inside the page are several now defunct numbers for personnel assigned to Area 51. Because the base

was to the east of America's primary atomic testing ground, it was often bathed in radioactive fal out during the years when above-ground nuclear blasts were uncorked in the Nevada desert. 劒e designation "Area 51" is found on several fal out maps from the '50s and '60s. But by the late '70s, Area 51 had al but disappeared from those maps. 劒e quadrangle-shaped box on the maps was left empty. By the 1980s, reporters who asked questions about the base were told that no such base exists, even though, for a time, it was possible to see the base

from the tops of nearby mountain tops. Soviet spy satel ites released high-resolution photos of the two-mile-long runway and support structures.

Something had changed. Like a military Brigadoon, the base had essential y disappeared.

As a journalist, I am aware that I wil never be al owed to set foot on the base. Yet it has become a major part of my personal identity and professional life. It is as much a part of my life as it is for the men and women who worked out there, toiling in obscurity in order to protect the rest of us during the darkest days of the Cold War. When I kick the bucket, I'm sure my obituary wil contain some reference to the Area 51 stories I have written throughout my career.

When I was rst hired by KLAS-TV in 1981, my friend, mentor, and news director, Robert Stoldal, handed me a thin le he had col ected over the years.

It contained twenty-four or so pages of news clippings he had cul ed during his long career as a newsman. 劒is was the sum total of what the public knew about Area 51 at the time. 劒ere were a few fuzzy references to the base in newspaper articles from the 1970s. Most of the pages were clippings from Aviation Week & Space Technology, an excel ent publication whose readers sometimes referred to the magazine as "Aviation Leak." Stoldal had developed a passionate interest in the secret base and thought I might be the right guy to eventual y nd out what goes on out there.

I didn't write any Area 51 stories until a few years later. In 1984, the U. S.

Air Force il egal y seized control of 89,000 acres of public land adjacent to Groom Lake. One day, the land was accessible; the next, it was off limits.

Armed guards patrol ed the perimeter. Ranchers, rock hounds, even property owners who tried to traverse the new line in the sand were warned to stay out or else. Signs warned that the “use of deadly force” had been authorized. 劒e Air Force acknowledged it seized the land without any legal permission.

Months later, AF officials appeared before Congress to ask for retroactive authority to do what they had already done. Elected officials in Nevada griped about it, as did the public, but the Pentagon had no intention of re-opening the 89,000 acres to the public. Nor would they say why they needed al that acreage.

劒e extraordinarily brazen move by the Air Force generated headlines for a few months. A KLAS reporter named Richard Urey produced a multi-part series about the known history of Area 51, but the buzz died down. For years,

anyone who cal ed Nel is Air Force base to ask about Area 51 was told the military could not con rm the existence of such a facility. 劒us, it became a non-existent base, a preposterous position that was maintained for years.

Taxpayers and voters funded al of the work that occurred at the base. Visitors could see it with their own eyes, or via telescopes. Foreign satel ites photographed it and foreign planes had permission to y over it via the Open Skies treaty, but American citizens were told it did not exist.

劒e Air Force position came to be even more extreme in the 1990s when it argued in court lings that it never used the name Area 51. 劒e claims were made in connection with lawsuits led by Groom Lake employees, who sued the government to nd out what toxic chemicals they had been exposed to while working out there. Secrecy was so extreme that nothing could ever leave Area 51, not even trash, so the base’s disposal system consisted of digging large trenches, l ing them with piles of discarded equipment and composite materials used in the development of classi ed projects such as Stealth technology, then the entire pile would be doused in jet fuel and set on re.

Workers testi ed that huge clouds of treacherous black smoke would engulf the base and clog their lungs. After years of exposure to who-knows-what, some of the workers started getting sick. A few died. Stil , their employer would not tel them what materials they had ingested. To do so might endanger national security, the Air Force lawyers argued. ꝺe case went al the way to the U. S. Supreme Court. (Attorneys for KLAS joined the case and argued for greater transparency.) Eventual y, the lawsuits became moot when an executive order from the White House exempted Area 51 from laws that govern every other piece of American soil. So much for transparency.

When I hear revisionists argue that Area 51 has never been a secret, that it isn't al that classi ed, it almost makes me laugh. ꝺe military and civilian contractors who operate out there have played deadly games with the public and with their own employees to maintain a level of extreme secrecy, so extreme that they deny the existence of the base, deny the name it has always used, and issue imsy cover stories, false narratives, and agrant denials in order to cloud and to protect one of the few places in our country where federal laws, even the Constitution, don't necessarily apply. Whenever someone tel s me that Area 51 isn't al that secret, I suggest they try to drive across the invisible line outside the base and see what happens.

Security around Groom Lake was already tight when Bob Lazar entered the picture. In the years since his story exploded onto the international stage, tens of thousands of people have made the trek out into the desert to see for themselves what might be going on. Every major news organization in the world has beaten a path to Area 51's door. On any given night, dozens of aviation buffs and UFO hunters are camped around the perimeter, trying to catch glimpses of whatever might be ying around out there. In response to this ongoing invasion of the curious, base security measures have hardened and multiplied. ꝺere are sensors on public land, miles from the actual perimeter, which warn Area 51 personnel whenever vehicles are approaching. ꝺe primary entry points are ringed with cameras, some disguised as desert ora.

ꝺere are other, more advanced sensors that can differentiate the smel of a

human versus, say, a wild horse. 劒ere are layers of armed security on the perimeter, which is 12 miles outside the principal facilities at Groom Lake.

Any plane that gets too close to the forbidden zone wil be met by F-16s.

Military pilots who accidental y stray into “劒e Box” are grounded, scolded, and debriefed when they land. Hikers who wander too close to the invisible line get buzzed by helicopter gunships or chased by the fearsome “Cammo Dudes.” 劒ey take their security very seriously out there, especial y for a facility that either doesn’t exist or supposedly isn’t al that classi ed. Many times over the years, UFO fans have contacted me with the suggestion that we should assemble an armada of Winnebagos and then coordinate a massive invasion of Area 51, in the mistaken belief that “they can’t possibly stop al of us.” I have strongly advised against this foolhardy plan because I am certain the base would have no problem repel ing such an incursion.

A similar suggestion took on a life of its own starting in the spring of 2019.

Bob Lazar and lmmaker Jeremy Corbel sat down for an interview with the world’s most popular podcaster, comedian and television personality Joe Rogan. 劒at interview was viewed mil ions of times within a matter of days. It also inspired one listener, a young man named Matty Roberts, to create a Facebook page which urged the public to “Storm Area 51.” Roberts said the idea was a joke, pure satire, and he never meant for it to be taken seriously. But within a few days, the page he created became a viral sensation. 劒ree weeks later, the page had been viewed 2.8 mil ion times, and more than 1.5 mil ion people had pledged to participate in the plan to perform a mass public invasion of the secret base. Another mil ion or so people said they were

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thinking about participating. For one reason or another, Rogan’s interview and Corbel ’s lm helped renew interest in Lazar’s tale, and the discussion touched a nerve with the public. Dozens of humorous memes popped up along with tweets from celebrities who say they planned to participate. At the time of this writing, it is unclear what wil happen on the date designated for the event.

ffe Air Force has issued a warning that it would be dangerous for anyone to try to enter the secure military facility, but businesses in and around the base are already bracing for a huge wave of visitors.

WHEN BOB LAZAR WAS FIRST INTERVIEWED, ANONYMOUSLY and in silhouette, on KLAS-TV in May 1989, the story he told exploded. Las Vegas talk radio stations jumped on it, debating the merits almost nightly. A popular host named Bil y Goodman organized bus trips to the outskirts of Groom Lake for UFO viewing parties. ffe innocuous but ominous-sounding "black mailbox"

was transformed into a seemingly sacred gathering site. ffe public debated the identity of the mystery man who claimed to have worked at a secret facility near Papoose Dry Lake, a place he referred to as S-4. ffe tiny town of Rachel became a UFO mecca of sorts, and the friendly folks at the Rachel Bar and Gril were thril ed to welcome the large in ux of UFO-curious customers.

ffat rst burst of public interest was a blip on the Richter scale compared to what fol owed. For seven months between May and November of 1989, I was assigned to learn al that I could about Lazar, and about UFOs. It was a crash course, like cramming for a nal exam. I read dozens of books, hundreds of newspaper and magazine articles, consulted with the most credible researchers in the eld, and tried to get my head around the basics of what proved to be a very complicated subject. I was cocky and naïve enough to believe at the time that what the UFO topic needed was a thorough vetting by a journalist. I even boasted to co-workers that I should be able to gure the whole thing out in about six months. Bing, bam, boom—mystery solved.

Suffice to say, that prediction proved to be wildly inaccurate. ffree decades later, I stil don't have solid answers about any of the biggest questions.

During those ensuing months, my photographer Bryant Blackburn and I traveled extensively in an effort to learn about Lazar and about the mysterious base where he said he worked. On dozens of nights, we parked our vehicle in

various locations on the outskirts of Papoose Dry Lake and Area 5, foolishly thinking we were avoiding the scrutiny of security personnel. Our Wednesday night vigils never succeeded in obtaining any video of UF-type craft. I dug into Lazar's background, checked every reference on the unique resume he had provided to us, spoke to his friends, spent time getting to know his inner circle, and even traveled to Los Alamos National Lab with Lazar to nd out if he real y did know his way around the base, where he supposedly worked for a time in the early '80s. In the pre-Internet days, it was much more difficult to reconstruct someone's personal life than it is today, but Lazar proved to be in a category al his own. Much of what we tried to obtain proved to be unavailable or non-existent.

In the years since the Lazar story rst surfaced, many researchers have conducted their own investigations into his background. Several wel -known UFO authorities have claimed they managed to unearth de nitive evidence to prove that Lazar is a liar. 劒e late nuclear physicist Stanton Friedman, one of the best known and most respected UFO investigators, became the highest pro le Lazar debunker, and although he often told his audiences that he was done with the case, he continued to write and speak about Lazar right up until his death in 2019. Bob Lazar became Friedman's white whale. Stan was a friend of mine and I greatly respected his decades of work on the UFO subject, but he had a blind spot when it came to Lazar. And contrary to his claims about how he exposed Lazar to be a fraud, the information he gleaned about Lazar's background did not constitute a "gotcha" moment. 劒ey were reported on KLAS-TV in the very rst news stories we aired about Lazar.

In November 1989, we unleashed a massive, multi-part news series cal ed UFOs: 刦e Best Evidence. In Part 5 of that series, we revealed Lazar's identity, showed his face, and al owed him to tel the broad outlines of his astonishing tale. Our news series was—and stil is—the highest rated, most viewed news project ever produced in Las Vegas. Transcripts of the nightly segments were sent al over the world via a edgling service known as the Internet. UFO

writers, researchers and luminaries al weighed in on the subject of Lazar's veracity. UFO tourism exploded to the point that the Rachel Bar and Gril

changed its name to the Little A’Le’Inn.

꧒e UFO critics who later claimed they had debunked Lazar’s background conveniently overlooked the information that was conveyed in each of those initial news stories. ꧒e schools listed on Lazar’s resume told me they had no

records he ever attended courses there and no record of any advanced degrees.

Los Alamos Lab told me they had no record of an employee named Robert Lazar. I included that information in the very rst stories about Lazar, though

—in their zeal to be the rst debunker of the tale—different UFO bigwigs took turns pretending they had dug up in ammatory dirt on their own. I give credit to those who actual y did some of the legwork in covering the same ground we covered months earlier, but the information about gaps in Lazar’s story was part of the public record from day one.

During the early stages of our investigation of Lazar’s claims, the absence of school records was a major concern. If he would lie about where he went to col ege, might he also lie about working on ying saucers out at S-4? Lazar told us that someone was erasing the paper trail of his life to that point. We decided to focus on his claim about working as a physicist at Los Alamos National Lab.

If he real y was employed there, and if it could be proven that he worked on sensitive or classi ed projects, then it was at least plausible that he could have been hired to work on another sensitive, defense-related project in the Nevada desert. It would also make sense that he must have had some level of education to make it into the door of Los Alamos, given that no one is hired to work there without some sort of col ege degree. More importantly, it would mean he had been given a security clearance, which would have required a background check to verify his credentials.

After my rst inquiry to LANL, I thought the story might be dead in the water. A spokesperson told me the lab had no record of anyone named Robert Lazar ever working there. Damn. In the years since I mailed that rst letter to the lab,

critics have made a big deal out of whether Lazar claimed to have worked “for” the lab or “at” the lab. He always told me he worked at the lab, including some time inside its Meson facility, a large structure that houses a massive particle accelerator. In real life, that might seem like a nitpicky point.

In the bizarre paral el reality known as “UFO World,” though, it can—and did

—spark arguments that have persisted for decades.

ffe response from the lab took the air out of my lungs. I thought the story might have hit a dead end. If we could not prove Lazar was employed at LANL, if the official denials held up, we likely would have pul ed the plug right there, and the rest of the world would never learn his name or hear the details about his experiences. But something was off. It didn’t feel right. We kept poking around for more information and obtained a copy of the official

LANL phone book, which listed the names of everyone who worked at the lab during the time Lazar said he was there. Sure enough, his name was listed in alphabetical order—Robert Scott Lazar. Lazar had also said in our rst interview that he had been featured on the cover of the Los Alamos Monitor, a story about a jet engine he had instal ed in his Honda. ffe news report described Lazar as a physicist at Los Alamos Lab. ffat front-page story caught the eye of physicist Dr. Edward Tel er, who was visiting LANL on the day the article appeared. I con rmed that Tel er real y was at the lab on that same date.

ffe reason that point became important is that Lazar said a chance meeting with Tel er on the grounds of LANL became a factor in his hiring years later to work in the Nevada desert.

Here’s more minutiae that may or may not matter, depending on whether you reside in UFO World or not. I continued to communicate with LANL’s public affairs team. I cal ed. I sent letters. I sent copies of the newspaper article and the phone book entry. ffe staff was always courteous and professional, but it seemed like they grew weary of the back and forth. ffey eventual y told me they found an employee number for Lazar, but added that he had been hired

by a company cal ed Kirk Mayer, a subcontractor at the lab. Kirk Mayer is essential y a headhunter rm. 劒ey hire technical and scienti c personnel to l positions at LANL. So my quest for employment records turned to Kirk Mayer.

My rst inquiry was by telephone. I explained I was a reporter, seeking records about a former employee. I told them I had his signed permission to obtain the records. 劒e person on the other end of the phone told me that yes, the company did hire Lazar and did have records and agreed to provide copies.

Weeks went by, but no records arrived. I cal ed, wrote, wrote again. Each time I communicated with Kirk Mayer, I got less information. I was told the records could not be located. Later I was told the records did not exist. 劒en they stopped responding to me altogether.

劒is went on for months. By that point, I knew Lazar was employed at the lab for a period. For one thing, we interviewed four former co-workers who veri ed it. In addition, Lazar told us he could take us on a tour of the lab itself.

Bryant and I ew to New Mexico, met Lazar outside the lab, and carried our camera right through the gate. Bob waved to a man in the security hutch and we were al owed to drive in without anyone asking who we were or checking our identi cation. Lazar walked us through multiple buildings, said hel o to

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several employees, took us on a thorough tour that culminated at the humongous particle accelerator in the meson facility. We recorded it on video.

No one stopped us or asked who we were. Lazar seemed at home. (Snippets of the video from that tour were aired on KLAS months later.) In the years since the story broke, other lab employees have surfaced who remember Lazar, including a physicist who told Jeremy Corbel that he remembers being in classi ed brie ngs with Lazar. While the physicist says he never asked Lazar to prove that he had the credentials to be in the brie ngs, he gured Lazar belonged there.

As a young news reporter, I was surprised at how our Lazar stories were received by luminaries in the pro-UFO universe. I naively thought they might welcome a new source of information. But it quickly became obvious that in that particular slice of society, turf wars abound, backbiting and in ghting are common, and everyone wants the truth about UFOs, so long as it is their version of truth. Mainstream media outlets at the time teed off on the story, poked fun at it, printed columns and cartoons lampooning the al egations, and general y had a good laugh—without ever doing any legwork to check out the basics of the story. Eventual y, every news organization in the world would beat a path to Area 51's door, but for the rst several years, the reaction among my media col eagues was pretty brutal.

ꠇe public, however, couldn't get enough. It's been thirty years since the story broke, but stil , I get inquiries about Area 51 and Lazar every single day, whether I'm shopping in a grocery store or in a restaurant having dinner, even standing at a urinal in a men's room, random people approach me to ask what I real y think about UFOs and Lazar. Most of them don't real y care what I think. ꠇey mostly want to share their own UFO story or experience. ꠇe fact that this topic touches the public in deep and inexplicable ways is frustrating for media skeptics and professional debunkers. Too bad, I say.

NO ONE IS LIKELY TO EVER PROVE FOR SURE WHETHER Lazar told the truth. I am not holding my breath for the government to suddenly open up the hangar doors and al ow the rest of us to inspect, photograph, or essential y kick the tires on any recovered craft of uncertain origin. It isn't a black and white, true or false story. It is complicated, nuanced, difficult. In my experience, people

tend to make up their minds about Lazar pretty quickly and then search for the set of facts that justify their point of view, while ignoring or excluding al the inconvenient parts. ꠇat is certainly the way it was with my late friend Stan Friedman. He and I had many pointed but friendly exchanges about Lazar over the years, including two face-to-face private conversations. Stan expressed the oft-repeated reasons why he doubted Lazar, and I told him the reasons why I felt differently. I am not sure he listened to any of them. He never addressed most of the counterpoints in any public forum.

My support for Lazar's claims is conditional, in that I recognize it wil never be proven beyond reasonable doubt, but I have continued to report the story because of two factors. One is because of the things I personal y witnessed during the months after he sat down for the anonymous "Dennis" interview.

His house was broken into a few times. 劒e intruders didn't burglarize the home. Instead, they played mind games. 劒ey moved around furniture, erased things that were written on his white board, opened windows, and made it clear that someone had been inside. 劒ey did the same to his car, leaving the doors open and the windows rol ed down, his glovebox open, and a semi-automatic pistol lying on the seat. Multiple threats were made. Lazar took them seriously, and on at least two occasions, I witnessed how visibly rattled he was by the ominous phone cal s he received. 劒ere also was a concerted effort to fol ow a smal group of us that included Lazar, his friend Gene Huff, and—

for a time—billionaire businessman Robert Bigelow during a period of several months when we would convene to chat about the latest developments. My phone at KLAS was tapped. I know this because six people who spoke to me by phone and offered to provide me additional information about unusual materials and technology being tested in the Nevada desert were visited by security personnel immediately after speaking to me. Al six were warned to keep their mouths shut. 劒at happened. I saw it. Today, we take for granted the notion that al of our phone cal s and electronic communications are duly catalogued and likely stored in some gigantic NSA database somewhere, but back then, the knowledge that someone was listening to the phone of a journalist—without ever obtaining a warrant—was deeply unsettling.

劒e other aspect of Lazar's tale that is general y ignored by his critics is the list of things he told us that turned out to be true and veri able. For one thing, he knew there was a place on the Nel is Air Force base range designated as S-4.

劒is had never been reported in any newspaper, but when I cal ed Nel is to

inquire about it, a spokesperson con rmed there was such a place on the Nevada range. In fact, there was more than one, according to the public affairs office at the base, though they would not tel me where the sites were or what activity takes place out there. Lazar also knew the name of the government agent who came to his home to conduct part of his background check for a security clearance. 瓣e name stood out—Mike 瓣igpen. Lazar thought

瓣igpen had said he worked for the FBI, but the FBI told me it has no such employee. A tipster con rmed to me that 瓣igpen was real, that he worked for an agency I had never heard of, something cal ed the Office of Federal Investigation or OFI. OFI, I was to learn, was a little-known federal out t that conducted background checks for persons seeking employment in classi ed programs. I even got a very surprised 瓣igpen on the phone but he would not comment. (瓣irty years later, he spoke to Jeremy Corbel and con rmed that he remembered working on Lazar's security clearance.) I led multiple FOIA requests for Lazar's records but was always stymied.

瓣e FBI, the Navy, and other agencies denied having any records on Lazar.

瓣is became relevant in 1990 when Lazar got into some legal trouble and was facing possible prison time for his bad decisions. I reached out to U. S.

Congressman James Bilbray of Nevada to see if he could help con rm Lazar's employment. Bilbray's office wrote to the court that it had made inquiries about Lazar to the FBI and had received an unusual response. 瓣e FBI declined to provide any records and told Bilbray that the congressman "did not have a need to know" about Lazar's employment. 瓣e Bureau could have said it had no records on Lazar, but didn't. During that court proceeding, it would have been much easier for Lazar if he had fessed up to being a UFO con man, admitted he had made the whole thing up, and hoped for leniency. But he didn't do that. Instead, he told the court the same story he had told me about where he had been educated and where he had worked.

Most notably, Lazar somehow knew when and where the Navy was going to conduct test ights of its unusual craft. On three consecutive Wednesday

nights in the spring of 1989, Lazar took groups of friends out into the desert to see the strange objects rise above the mountain ridge—not at Groom Lake

—but rather in the area around the Papoose Dry Lake, 15 miles south of Groom and the location of what Lazar said was the S-4 instal ation built into the side of a mountain. Every communication I have received from the military as wel as from former Area 51 employees who dismiss Lazar's claims

have al eged there has never been any facility or base of any kind located near Papoose Dry Lake. I interviewed al of the people who made the treks into the desert with Lazar. Al of them con rmed the glowing object they witnessed appeared to be a large, disc-shaped craft of some kind. It rose, performed simple maneuvers, then lowered back down below the mountain ridge. At least one of those sightings was recorded on video and the clip was included in my initial news reports. How did Lazar know about the test ights? Was he, as some skeptics have claimed, merely a janitor at Area 51, or some low-level contractor who overheard the information about the test schedule? If so, then the spooks at Groom Lake had some serious security breaches back then to al ow a mere janitor access to such sensitive information. Satel ite photos have long con rmed that a road from Groom Lake to Papoose Lake exists, just as Lazar described it and contrary to government denials of ever having a presence at Papoose. How did Lazar know?

His most controversial claim might be the mystery material known as Element 115. Lazar is certainly not the rst person to speculate about the existence of such a substance. Physicists have long theorized that a super heavy element might exist, an island of stability in the range of elements 115 and 116

on the periodic chart. When Lazar made the claim that he had seen pieces of Element 115 and that it was the miraculous power source for the craft that were being reverse-engineered at S-4, no such element existed on the period chart. It does now. Scienti c teams have created miniscule amounts of Element 115 by using powerful particle accelerators. 劒e isotope created in the lab isn't anything like the material described by Lazar, but those who are

familiar with the ful story know that Lazar told us in this rst interview that it was unlikely humans could ever manufacture the isotope he encountered. 劒e super heavy sample he somehow obtained was likely produced natural y, perhaps in a double star system where gravitational forces exceeded anything that could be reproduced in a human lab. By the way, for the record, the sample that Lazar possessed for a time is not something he stole from S-4. Instead, it came from Los Alamos, where, according to Lazar, there was a machining operation for a time in which employees used equipment that whittled and shaped pieces of 115 so they would t perfectly into the advanced reactor in the Sport Model craft Lazar says he inspected. It's a lot to digest and I would not expect skeptics to believe it, though they could at least consider the ful story that was related in 1989.

While many critics wil never believe Lazar's tale about Element 115, someone takes it very seriously. During the production of Corbel 's lm about Lazar, the two men had a candid conversation about the capabilities of the mystery element and where a sample might have been stored for protection.

劒e day after that conversation, a team of 24 law enforcement personnel showed up at Lazar's place of business in rural Michigan. FBI agents ashed a search warrant (but did not provide a copy) and said they were seeking sales receipts related to a suspected murder case involving someone who once bought chemicals from Lazar's company, United Nuclear. If the FBI wanted years-old sales receipts, al they had to do was ask. 劒ey certainly did not need to stake out Lazar's home and office for days, or conduct electronic surveil ance, or send a team of 24 people to raid his business. To date, the information that was seized, including mirrored copies of Lazar's computers, have produced no criminal charges, for Lazar or anyone else. Is it possible the agents were there to nd the missing piece of Element 115? I have my own suspicions, especial y since there had been a similar raid and massive show of repower at Lazar's home years earlier. Both times, agents left the scene without obtaining the clam-shel casing that held the precious sample I had seen at Lazar's Las Vegas home decades earlier.

PEOPLE ARE WELCOME TO BELIEVE WHATEVER THEY WANT

about Lazar and his claims. It no longer matters to me, or to Lazar. He's told me many times since 1989 that he prefers it if the public does not believe him because his life is much simpler when the UFO World does not intrude on it. 劒e fact is, his story is now bigger than it was thirty years ago. 劒e documentary lm about his claims has ignited al of the old arguments al over again. Joe Rogan's podcast kicked it into the stratosphere. At the time I am writing this, we have no idea how many people might show up for the "Storm Area 51" event planned for September 2019.

But we know for certain the story is not in danger of fading away. Much to the chagrin of Lazar's many critics, his tale is now permanently etched into the public consciousness. It is pop culture, modern mythology, carved into the col ective psyche. Whether his story can ever be proven, one way or another, it has prevailed. 劒e renewed interest in Lazar's claims comes at a time when the

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UFO subject is hotter than at any time in my professional life. 劒e December 2017 revelations in the New York Times about a secret Pentagon study of UFOs and related phenomena, the blockbuster release of three UFO videos recorded by military pilots, and the testimony of credible witnesses, including Black Aces commander David Fravor about the capabilities of the craft he encountered, have only bolstered Lazar's story. Fravor, in particular, has remarked on the similarities between the technology Lazar says he tinkered with and the astonishing "Tic Tac" craft Fravor and other Navy personnel witnessed and documented in 2004 off the coast of Southern California.

Fravor and Lazar had a chance to meet during the spring of this year and spent hours comparing notes. For what it's worth, Fravor thinks Lazar is legit.

Members of Congress are, as of now, receiving closed-door brie ngs about multiple UFO encounters being reported by our best and brightest military aviators. 劒e incidents prove that someone, somewhere, has technology that is far beyond the best aerospace platforms in the U. S. arsenal.

LAZAR’S STORY HAS COME A LONG WAY SINCE THAT AFTERnoon in May 1989, when we rst unleashed it on the world. Whether you believe it or not does not real y matter to Lazar, but we can say with some con dence that it’s not going away.

PREFACE

I SAT IN A WINDOWLESS ROOM IN A BUILDING SOMEWHERE on the site of a military instal ation at Groom Lake in the Nevada desert. 劒e only sound was the faint hum of the uorescent lights and the occasional passing of my pen across the page. Seated at a smal rectangular desk, for nearly an hour, I had been l ing out forms for a job I was real y looking forward to beginning.

When it was to begin and what it was I would be doing was stil a matter to be settled. At least I knew for whom I was going to be working—EG&G. Having previously worked at the Los Alamos National Laboratory, I was familiar with EG&G’s history. Named after three of its founders—the scientists Harold Edgerton, his one-time graduate student Kenneth Germeshausen, and, later, Herbert Grier—they had executed high-speed photographic images of implosions tests conducted as part of the Manhattan Project. 劒e company continued as a defense contractor, working with the Atomic Energy Commission on a variety of projects at the Nevada Test Site to develop weapons. In Las Vegas most everyone either worked in the resort/gambling industry or as part of what hippies in the 1960s denigrated as the Military Industrial Complex. In that sense, despite al the glitter and glamour associated with one its industries, Las Vegas was kind of a company town al dressed up in either sequins or lab coats or military uniforms. 劒en there were those who worked in various states of undress. Simply put, I was aware of what went on at Groom Lake in the defense industry and of who some of the major players were.

If, in January of 1989, I was eager to get back to working in the scienti c community after more than four years—instead of the fairly lucrative but ultimately not very mental y engaging photo development business I owned and operated out of my house—I was absolutely thril ed to be going to work

for one of the biggest players in the defense industry. I was especial y keen on working for them because I'd always had an interest in explosive reactions, the bigger the better. What could be better than working alongside people at the

forefront of our defense industry who had a long and successful track record with the biggest of bangs—nuclear weapons?

Sign me up, as the expression goes, but the literal signing up was taking a lot more effort than I wanted it to.

Some of my excitement was tempered by the fact that I was sitting in that room trying to dredge up the names and addresses of at least ve individuals who knew me when I was living with my adoptive parents back in Westbury, Long Island, New York, in the mid-sixties. Having worked at Los Alamos, I was used to the idea of having to provide lists of references for a job, and also a more comprehensive list of past residences, acquaintances, residences, in order to receive the necessary security clearances. For my work at EG&G, in what I was soon to learn was their Special Projects Division, I needed the highest clearance possible: Majestic. I was told that level was 22 levels higher than the highest civilian clearance, known as Q clearance. While I understood the need for that level of clearance, it was stil a pain in the ass to be sitting there wracking my brain trying to recal the names and contact information of people I hadn't seen in years.

I shifted uncomfortably in my seat and used the silver push button of a Bic Clic pen to trace the wood grain pattern on the table. I smiled rueful y and shook my head. I knew that a retractable pen like the one I held in my hand worked as a result of the interaction between the thrust tube, the thrust device, and the ink chamber and spring. It could produce a reaction sufficient enough to launch the pen off the table's surface by as much as eight to eleven mil imeters. I did not know, however, the contact information for my supervisor at Fairchild Electronics in Chatsworth, California, where I worked while attending classes at Pierce Junior Col ege. I'd spent most of my life interested in taking things apart and putting them back together, such as retractable pens other devices, and I had made a jet-powered bicycle in my

youth and a jet-powered car in my adulthood. But piecing together my employment history and personal life was proving to be a real evil.

I looked up at the security guard who stood sentinel to one side of the closed door and wondered if he found this trial by memory as tedious as I did.

He was rooted there in what I'd jokingly come to think of over the years as penis protection mode—the manner in which many military men stood when in public. His crossed hands were anchored in front of his groin, his feet spread to just shy of shoulder width. His light blue uniform was military style, but

bore no adornments—stripes, insignias, badges—to indicate rank or any other kind of identi cation. He stood square-jawed and staring straight ahead, as if there was something far beyond the wal s of this twelve-by-twelve room that held his attention.

The third member of our trio—Dennis Mariani—was of similar military bearing and appearance. When I shifted my glance to him, he scratched at his close-cropped hair. It was the rst he'd moved, other than to blink, shift his eyes, or slide, retrieve, or stack a form, since he'd sat down across from me.

Unlike the security guard, Dennis wore a civilian uniform—a navy blue suit, something that could have come out of a man's closet in the 1950s or 1960s.

The jacket had narrow lapels and a single chest pocket.

Normal y, I wouldn't have noticed or commented on such things, but for the last three hours, since Dennis had met me at the EG&G offices on the grounds of McCarran Airport and accompanied me on the Janet Air Flight out to this remote location, we'd never been separated by more than a few feet.

There hadn't been a whole lot else to look at but this sturdily built, heavy lidded man who seemed to be in his mid-thirties. In many respects Dennis reminded me of a boxer—not the athlete (although, come to think of it, he did have the air of a pugilist about him) but more the canine breed. His

expression was seldom slack; he appeared highly attentive and yet his demeanor revealed nothing of what he was he thinking or feeling.

I'd met Dennis two days earlier at the second of my interviews with the team from EG&G. He sat on the periphery of our group interview, not asking any questions, in his dog-like manner, sitting at the edge of our relight, observant and seemingly ready to pounce. Whether he was preventing any one from getting into or out of that circle I could not determine. He hadn't been present at the rst interview, one that I felt had not gone at al wel . I'd left, despairing of my chances. A few days lapsed and I grew more certain that I'd have to enlarge my circle of employment inquiry beyond the driving distance from our home, the one I shared with my second wife Tracy, in the west end of Las Vegas. When I was cal ed in for a second interview, I was told that I was considered to be over quali ed for the original position for which I'd interviewed. 劻ey were impressed with my knowledge and wanted to see how I might t in as a senior physicist in the Special Projects Division. Obviously, they expected I would accept, and for that reason I was now searching my memory for the data required to earn me that Majestic clearance.

I'd always had a bit of the arsonist in me, not so much as a prankster but as an agitator. I grew tired of dul routines, and particularly the display of self-importance that people who worked at places like Los Alamos (and, I presumed at this point, out at Groom Lake and at EG&G) wore like ID

badges: I do serious work; I am a serious person. In the past, I loved to pop that bubble of arrogance with little jokes and witticisms. Mostly I did this to amuse myself rather than take down any of my col eagues. 劻e atmosphere in the room that day was heavy with the elements of that kind of grandiosity, but I knew it was too soon to risk doing anything to relieve the tension.

I glanced at my watch. It was now 10:30 at night. I'd hoped that by noting the time, I'd set off some kind of normal human social interaction.

"Do you have somewhere else to be?"

"What time do you have?"

“Does that watch have a calculator function?”

“What kind of battery life do you get with that?”

“We won’t be here much longer.”

“Take your time we’ve got al night.”

Al of those oated through my mind as possibilities, but Dennis, and what I decided to now cal his “Mariani-ette,” remained statue-like, silent and stil .

I decided to dip my toe into the water. “Time ies . . . “I muttered under my breath.

Dennis rose to the bait, “Do you have a question?” His voice sounded familiar, somewhat like the Long Islanders I knew back when, stretching the rst two words out as “dew” and “yew.”

“No. No question,” I said, “Just thinking out loud. I just don’t have al these names and numbers at my ngertips, you know?”

I paused waiting for him to respond. When he didn’t, I added, “I know how important the security clearance is. I want to get this done as quickly as possible. Help make your job easier.”

“Do what you can. We’l do our job.”

“I wasn’t insinuating—” I stopped when I saw something brie y pass across Dennis’s eyes. A sign, maybe, of his irritation with me?

I thought again of that second interview I’d just had, how much more, if not jovial, at least col egial, it had al seemed. We were al there for the same reason, al men with technical/scienti c backgrounds, and while we weren’t cracking jokes, we were at least being human. Dennis had sat there then as

unresponsive and blank as he was now. I couldn’t tel you the names or the titles of the group of men I’d spoken with that day, but I did recal after the

meeting ended, that I was most drawn to Dennis and wondered what his story was. Was he always in such a bad mood? As I sat there in that tiny office with him, I felt like my future was hanging in the balance. If this guy ended up hating me, which seemed to be the case, could he make the difference between me being hired ful time and not?

As was made clear to me, I was being hired on a provisional basis. Until I received my Majestic clearance, I was only going to work on site on an on-cal basis. I was pleased to hear that, and even more pleased that they agreed that I could continue to work during the day running the photo developing service out of my home. I needed to pay the bil s and al that, I told them. 劒ey understood. Stil , I'd have to be on cal and when I received noti cation via phone that I was to go into the "office" that day, I'd have very little time to get to McCarran to get myself aboard that Janet ight out to the air eld at Groom Lake.

Earlier that evening, I'd received the cal from a woman identifying herself as "Nancy from EG&G." I was to be at McCarran at 7:30 that evening.

Having lived in the Las Vegas area for more than ve years, I was already familiar with the sight of the so-cal ed Janet aircraft taking off and landing from Las Vegas' major airport. McCarran was located only a few miles from the famous Las Vegas strip. 劒ough Tracy and I lived in west Las Vegas, on the appropriately named James Lovel Street, our business took us al around the metro area and we both frequently saw the white Boeing 737 jets with the distinctive red markings along the fuselage at window height of the Janet jets.

No other emblems were needed, especial y since al the locals joked that Janet stood for Just Another Non-Existent Terminal. 劒at was a reference to the fact that though we daily saw those planes ferrying employees to and from what was often referred to as Area 51, for a long time the military and the government disavowed the existence of any kind of operation going on around Groom Lake.

Many speculated about what went on "out there." Given that the Nevada Test Site was also in the region, and having worked at a government facility with a

long history of secrecy, I was pretty sure that Area 51 was a place where experimental aircraft and weapons systems were tested. At the time, there were a few people on the fringe who were into UFOs and speculated about Roswel

and the like. I wasn't into the whole extraterrestrial debate and mythos. As a kid I watched Star Trek, but I was more interested in how its warp drive functioned than I was in about the various life forms they encountered. Some kids might have wanted to be Captain James T. Kirk and engage in extraterrestrial relations, but I wanted to be Scotty and get my hands on dilythium crystals and not the body of a nubile female life form from the planet Zetar.

飘at said, when Tracy and I were house shopping in Las Vegas, we attached no special importance to nding a home on a street named after an astronaut.

Jim Lovel was the commander of NASA's Apol o 13 mission. Whoever had developed our little area between Alta Drive to the north and Charleston Boulevard to the south must have had an interest in space exploration. In our little quadrilateral, there was Alan B. Shepherd Street, John Glenn Circle, Astronaut Avenue, Michael Col ins Place, and Skytrail Place, mixed in among the usual suspects: Oakhurst, Larch, and Hemlock. You could be arboreal or patriotic or a combination of both, but to be honest, Tracy and I remarked on the name of our street once and then it just quickly became ingrained as one of the thousands and thousands of unremarkable facts of our lives.

So, once I got the cal from Nancy to drive to the airport and EG&G for a ight I was thinking more about whether or not I should have brought a change of clothes or toiletries with me more than any kind of name coincidences. As a lover of explosive reactions, though, what was second to a nuclear blast in my mind was the thousands and thousands of pounds of thrust produced by those rockets used in the Apol o program. Little did I know how much of a role propulsion was going to play in my life in the months that fol owed that rst cal from Nancy.

As a scientist, I relied on rationality. I didn’t do so to the extent that Mr.

Spock might have, but certainly to a great enough degree that though I heard about things like the MJ-12 or Majestic 12 documents, I discounted them as a hoax. Friends and acquaintances knew about the conspiracy theory that existed around that al eged secret organization President Truman founded in 1947 to assist with the recovery and investigation of alien spacecraft. 瓣ose discussions were al a part of living in this company town, and the wild imaginings of those on the fringe were exactly that—imaginings: fun to ponder and speculate about, but, unlike the in uence of organized crime on the development and continued operation of Las Vegas, without real substance to support them. For

me, seeing, or having some other form of veri able empirical evidence, was believing.

瓣e issue of what to believe was on my mind the night of my rst trip to Area 51 only because I was going to have to explain to my wife why I was leaving the house so late on a work night. Since Tracy’s father had been employed at Los Alamos and the two of us met there before moving to Las Vegas, she understood why it was that I couldn’t tel her much about my new job. I wasn’t being evasive or secretive; as I set out from home that night I truly had no real idea what I would be expected to do that evening or on subsequent evenings. What did strike both of us as odd was that I had to jump immediately into action that night. Who, other than rst responders and other emergency personnel, worked under such conditions?

“I need to report to EG&G,” I said to Tracy. I rushed around the house trying to nd my wal et and a lint-free cloth to clean my glasses. Oncoming headlights were bad enough, but when the light refracted off smudged lenses, the blurring and blinding was even worse. I was out the door in less than twenty minutes, minus the change of clothes and toiletries I previously mentioned.

My post–rush hour drive to the airport was uneventful, as was the ight out of Vegas. Only a handful of passengers was on the ight with Dennis and me.

He had met me at the offices of EG&G and escorted me through a security gate and out onto the tarmac. We exchanged little more than a brief greeting and I took Dennis's command to "Fol ow me," to the most literal extent possible. If he wasn't going to speak, then neither was I. I was reminded of the times my father, Al, took me into New York City or Queens on the Long Island Railroad. Most of the other riders on the train sat singly or, if forced into being seated next to someone else, regarded him or her as nothing more than a xture of the train's cabin, something to sometimes bump up against but not to engage in a conversation with. Even the pilots on the ight were silent.

At the point when I felt the plane's speed slacken, Dennis turned to me and said, inclining his head toward the window, "飏at's the Groom Lake facility below."

"Yes. I've heard of it," I told him.

"飏at's where we'l be landing."

I didn't respond at al .

Dennis's brow raised in surprise. His reaction triggered a similar one in me.

His statement seemed obvious, though when we departed McCarran, Dennis made no indication of where we were headed. I didn't tel him that I assumed that Area 51 was our destination. Maybe I'd spoiled the party for him a bit; maybe he liked to see others get excited at the mention of anything to do with Area 51. 飏e fact that he was even speaking to me seemed like a spel that I shouldn't break with any unnecessary comment.

We covered the hundred or so miles quickly, and I imagined our ight path looking something like a steep spike on an oscil oscope. Once we disembarked from the plane, Dennis and I boarded a school bus. It was no longer in its traditional yel ow and black livery but had been painted navy blue. Al of the windows with the exception of the front windshield had been blacked out. We proceeded along a paved road to the rst stop, a nondescript single-story office building. I fol owed Dennis out of the bus. 飏e late December desert air was cool but refreshing. It was only then that I thought

about how tired I was. I'd been unable to sleep, and had risen at six that morning.

Once inside the office complex, Dennis produced a plastic ID badge and held it out to a uniformed guard. 劒e reception area had sets of doors immediately to the left and right of the desk and one directly behind it. I was led to the left. Dennis switched on the lights and it took a moment for the uorescent bulb igniters to heat up the gas. In the dim half-light of the room, I made out a device in Dennis's hands—a camera.

"Stand there," Dennis said, pointing to a set of footprints embossed on the oor. He stepped behind a desk and I stood there for a few moments while he adjusted the equipment and then the ash stabbed at my eyes.

"No, 'Say cheese'?" I said, squinting hard to make out Dennis's expression.

Didn't matter if I could see his face or not, I immediately thought. It was going to be same sul en yet alert look.

"Fol ow me."

As we passed by the reception desk, the man behind it lifted up a walkie-talkie and produced a manila folder that he handed to Dennis. Neither of them exchanged a single word, let alone anything approximating a pleasantry.

I thought that I might like working here, if in fact this was where I would be working. No idle chitchat, no feigning interest in relative strangers. Sign me up.

And that was exactly what Dennis had me doing for nearly the next hour and a half. As I was getting to the last lines of the nal document, I could feel my eyelids scratching as I blinked. I tried to remember the last bit of liquid I had taken in. A coffee would have been nice or even just some water, but I saw no signs of the typical office refreshments anywhere in reception or the two rooms I'd been in so far.

“I think that should do it,” I said at last, sliding the last of the documents across the table to Dennis, careful to turn it so that he received it in the proper orientation.

“Fol ow me,” Dennis said after placing the last of the papers into the folder.

Outside Dennis said, “We’l take the bus back to the plane. 劒at wil take you back to Las Vegas. 劒ere you can pick up your car and go home.”

“劒at’s it?”

“For tonight.”

I thought it a bit odd that I had to be on the premises to l out that paperwork. I was considering asking Dennis why they thought it necessary for me to come al the way out there. Before I had a chance to ask, Dennis added,

“It’s late.”

I shrugged and thrust my hands in my pockets. I couldn’t refute the logic of that statement. I was more than a little amused by Dennis revealing the next steps we’d take—or the steps we’d retrace—and how unnecessary that was. It was also very much in keeping with how people in government jobs often conducted themselves. He stated very clearly the most obvious things but left unstated what I most wanted to know. When was I going to come back here?

What exactly would I be working on? Who would be my boss?

My string of questions was interrupted by the squeak of the bus brakes. I bit my tongue when Dennis said the last words to me that he’d offer that night.

“劒e bus is here.”

AN HOUR AND A HALF LATER, I SLID BENEATH THE SHEETS of our bed, hoping not to wake Tracy, but she snapped on the light on the nightstand.

“How was it?” she asked and tried to sti e a yawn.

“I couldn’t agree more,” I said.

She looked puzzled and I realized that my reference to her yawn wasn’t clear.

“Hard to tel from a rst day. A lot of paperwork. Boring stuff, real y.”

“I’m sure it wil get better.”

“It has to,” I said.

I lay awake for a few moments thinking about the next day. I was going to have to drive out to a realtor on the north end of the city to pick up a few rol s of lm. I couldn’t remember if I’d l ed the tank with gas.

Just as I was about to drift into sleep, Tracy said to me, “While you’re out tomorrow, can you pick up a can of coffee and a pint of half and half?”

CHAPTER

ONE

THE FOLLOWING MORNING, AFTER A QUICK CUP OF coffee, I headed out to pick up the photos from a regular client, a real estate appraiser, who worked out of an office near the Painted Desert Golf Course. 劒e course had just opened and along with it a housing development had gone up, and many others as wel , in that area far north of 劒e Strip. Many of my clients worked in real estate. New construction was booming, current residents were taking advantage of rising prices to move up to new homes, the population rose from just shy of 275,000 people in 1970 to nearly 465,000 by 1980, and was destined to reach 740,000 by the start of the ’90s. Simply put, business was good for anyone in real estate and housing, and I liked working with clients who were professionals rather than someone who came in griping that their vacation shots were over-exposed. Stil , as I drove along with my window down, the scent of change was in the air as much as the exhaust fumes from the many diesel engines powering ready-mix cement trucks and semi-tractor trailers loaded with lumber.

I wasn’t certain when I’d be cal ed back to EG&G, and in some ways that was okay with me, at least temporarily. I gured it was just a matter of time before my security clearance came through. I knew that traffic along I-15 was going to be tight, so I chose Nevada 95 instead, and I felt a little sorry for those commuters sealed in their cars listening to one Morning Zoo Crew or another on their radios. 瓣e news was stil ful of stories about the horri c terrorist bombing of a Pan Am ight over Lockerbie, Scotland. I switched off the radio, preferring the company of my thoughts to how horrifying it must have been in those few instants before the blast obliterated part of the craft and the intact pieces hurtled to the ground. Maybe because we were nearing the end of one year and the beginning of another but I was in a more contemplative mood than usual.

My rst day at EG&G didn’t exactly begin with a blaze of glory, but at least I had made some headway in my desire to return to more meaningful work. I enjoyed the photo business that my rst wife Carol and I had begun several years earlier when we were stil living in Los Alamos, but it was hardly what I would cal intel ectual y stimulating. For a while, that was ne with me. I had needed to clear my head. I adored Carol and the two of us had built a wonderful partnership together. As husband and wife, we shared a vision for what our lives should be like. In many ways, we were living the American Dream. I’d grown tired of working for someone else and had left my job working for Los Alamos National Laboratory (LANL) and set up Lazar Energy Systems, designing, developing and repairing alpha radiation detection systems. LANL used a lot of plutonium, which gives off alpha radiation, and for four years straight Lazar Energy Systems was granted a government contract to provide that form of radiation detection. As many had discovered before me, it was far better to work with a government agency that it was to work for one. It was certainly more lucrative, and I also got to be my own boss.

瓣e photo business was Carol’s to oversee, and that brought in more than a fair amount of revenue. We were doing wel nancial y. We’d even invested in a legalized brothel in Las Vegas that was taking in $100,000 a month at the time we purchased it for a mil ion dol ars. 瓣e Honeysuckle Ranch had been in business for more than thirty years, had a solid management team in place,

and with Carol doing careful oversight of the operation, we expected the wheels to keep on turning and the money to keep rol ing in. Add to that the photo operation, and the two of us were incredibly busy, mostly working from home, socking away as much as we could. I did give in to one indulgence—the purchase of a 1984 Chevrolet Corvette—but we lived a quiet and unassuming life. ﬀat is with the exception of the jet car I built and tooled around town in.

ﬀat eventual y got me some attention and gured prominently in my getting a job at EG&G.

I was too busy living my life to real y re ect much on it and our reasons for doing the things we were doing. ﬀe general tenor of the ’80s decade was examined in an Oliver Stone movie, Wal Street, that featured Michael Douglas as the nancier Gordon Gecko. His lizard-like name was no accident, and what most people who saw the lm wil likely remember is a line from a speech Gecko delivered: “Greed . . . is good.” I can’t say that Carol and I were greedy, but we were de nitely driven to succeed. Success, for us, and for most people,

meant making money. If it took running three separate business, not taking vacations, and having work-related issues on your mind twenty-four hours a day and seven days a week, then that was a price we were wil ing to pay.

A price I wasn’t wil ing to pay, and for a few months wasn’t even aware I was paying, was the loss of Carol’s life. For a time she was able to hide her pancreatic cancer diagnosis from me. Toward the end, her frequent absences from home, her weight loss, the sal owness of her complexion, and the anguished look of pain on her face when she thought I couldn’t see her aroused my suspicion. Before I could get her to stop saying that it was nothing, that she was just feeling a little run down, she waited for me to leave the house to run a few errands. She sat behind the wheel of her car in the closed garage and ended her life.

I can’t describe the feelings of devastation and loss that fol owed. I missed her and struggled with the kinds of questions that a man in his late thirties

ought not to have taken on—mortality and the larger issues of why we're here.

What do al our hard work and dreams mean when one day you can come home and discover that the woman you adore felt she had to face alone such an awful set of choices. To say that I was reeling is an understatement. I was overwhelmed by guilt and anger and sorrow. Responsibilities weighed heavily on me, and as much as I wanted to keep our businesses a oat as a way to honor what Carol and I had built, the feeling that none of it mattered eventual y won out.

Whatever minor dissatisfactions I had felt about Los Alamos, the intel ectual snobbery that many who worked at the LANL exhibited and lorded over the rest of the residents, paled in comparison to how much I associated that place with the loss of my wife. I wanted to get out of there, and eventual y did. One saving grace in al of this, which I felt Carol had a hand in making, was that Tracy was in my life. Carol had hired her to work at one of our photo stores. She was a bit of a wild child to be sure, but the two of us grew close, drawn together by the belief that Carol had set in motion the events that led to Tracy and me getting married soon after Carol's death. Tracy and I had travel ed to Las Vegas together to oversee some matter related to the photo business—what that matter was, is lost in a fog now. I don't know if either of us noted the irony of it, but we were married at the "We've Only Just Begun" chapel in Las Vegas in April of 1986.

WHEN I ARRIVED AT THE PICKUP POINT, I GOT OUT OF THE car and walked to the door. Taped to it was a nine-by-twelve mailer. Inside were a couple of rol s of Kodak Ektachrome lm and a brief note of apology for not being there to meet me in person. I tucked the envelope under my arm and while walking back to the car, realized that I hadn't eaten a thing since lunch the previous day. I found a little mom and pop diner nearby and pul ed in. 劒e lm would get developed and printed in plenty of time. Tracy would get her coffee and half and half. I settled into a booth, grateful that I could set my own schedule, and wondered how I might adjust to having to report and work under someone else's timeline.

In science, one of the ways that the word “entropy” is used is to talk about how any natural system tends to move from order to disorder. In many ways, that is a perfect description of that period of my life. Tracy helped keep things from fal ing apart completely, and there was something in my nature that also wouldn’t al ow me to just simply shrug my shoulders in resignation. It took me a few years of running the photo business in Las Vegas to regain my footing. I realized that when in doubt you should go back to the things you love, and for me, that was science.

It’s funny to think of it now, but as I struggled that night in that office l ing out paperwork and coming up with names and dates, the one that shouldn’t have escaped me, and in fact didn’t, was Alan Rothberg. Alan and I lived on the same block in Westbury and went to Bowling Green Elementary School together. His father was an instructor at Nassau Community Col ege where he taught chemistry. He’d bring home various equipment, high-voltage demonstrator tubes, Geisler tubes and other things. Some kids might have had children’s chemistry sets to play with, but with access to Alan’s father’s classroom and supplies we were conducting actual experiments with the kind of equipment you’d nd in a research center’s laboratory. My family moved around a bit at that time—back to Brooklyn, out to California, then back to Westbury—due to my dad’s work. Alan was the one constant for me in that neighborhood, and I took great delight in attending the classes his father taught during the summer session. I was in junior high by that time and Alan and I both loved the idea that we would take the same test as the “real”

students and could consistently outscore them.

In high school, I was an indifferent student in most of my other classes, but science was a big part of my academic life and success. Outside of school I devoured issues of Popular Science, Popular Mechanics, and Science and Mechanics as other kids my age lost themselves in the Marvel universe of Spiderman, Captain America, and other comic book heroes and vil ains. I stil have many back issues of those science magazines in my possession today.

What real y enticed me about the magazines I read was that they weren’t about pure, theoretical science. 劒ey provided me with plans that I could use

to make things. 劒e schematics for building a Wimshurst machine—an electrostatic generator—appeared in one issue. I was ready for the chal enge and built one, essential y using two discs with metal sections attached to them spin in opposite directions producing high voltage through electrostatic induction. Instead of relying on friction, they produce the charges through in uence. I also built a Tesla coil. I was stymied for a while on that project because I needed an automobile engine's ignition coil. Believe me, I was sorely tempted to raid my father's Oldsmobile, but I resisted. (Just prior to this I had instal ed in my room a box with a red light and a green light that I could switch between, indicating to my parents and my sister (like me, she was also adopted) when I'd al ow them into my room. I did this because my mom had gone into my inner sanctum while I was away to do some cleaning. She stepped into the room, got tangled in some electrical wires setting off a shower of sparks and tripping a few breakers. I didn't need to add to their worries about what their mad scientist had done by creating car trouble for them.) Fortunately for me, we were living in Brooklyn at the time and more than a few abandoned cars littered the neighborhood. While out riding my bike, I managed to scavenge an ignition coil from the dented, rusted, and windowless remains of an American Motors Pacer that other car carrion eaters had stripped. When the Tesla Coil was done, I could sit for hours watching it spew its colorful corona discharge, brush discharges and streamer arcs.

Almost as much as I got a rush of accomplishment when I built something from one of those magazines, I was also excited every time I looked at the Estes catalog. Estes Industries was based in Denver, Colorado, and they were producers of the nest functional scale model rockets at the time. Alan and I and a few other guys in Westbury were real y into building them and launching them while in junior high and high school. 劒e construction of the rocket wasn't that complex; in fact, quite the opposite. 劒e engines were

supplied either in the kit or could be purchased separately. 劒ere wasn't enough do-it-yourself activity to keep me interested in their ight. 劒e engines were housed within a sturdy cardboard tube. Inside the tube were a ceramic nozzle, solid propel ant, delay charge, ejection charge, and a clay retainer cap.

We’d run a coated wire through the nozzle and make contact with the solid propel ant. We then attached that wire to a battery and the electric current would heat the wire and ignite the solid propel ant. An engine could also be ignited by the hot gases from the propel ant of a booster engine.

I wanted to take on the chal enge of building my own rocket engines from scratch. Smal diameter cardboard tubing that would withstand the explosive forces wasn’t difficult to source. Many wire coat hangers had cardboard wrapped around the bottom of the triangle. It was the solid fuel that we needed to make (cook is probably a better term), and I set about researching. I read a number of articles that made reference to something cal ed “meal powder.” At that point, I didn’t understand what meal powder was—a nely grained gunpowder. To me, a meal was a meal, and the only meal I had access to was oatmeal. Oatmeal might be able to fuel muscles but it didn’t do a thing for those early rocket engines I tried to create.

It wasn’t that I didn’t have the money for replacement engines. In my early teens I’d gotten a job at a local reworks manufacturer. Talk about a kid in a candy store, but I didn’t get involved in the manufacturing process at al .

Mostly I just helped out by packaging the various items they produced. I didn’t earn a whole lot, but enough. I also learned enough to solve the rocket propel ant problem. 劒at information, plus greater exposure to Alan’s dad’s chemistry classes, and a few of his chemistry supplies, had me launching rockets thousands of feet into the air at Salisbury Park.

I knew enough from chemistry to know that combining potassium nitrate (KNO3) and sugar and heating them together would produce what those in the model rocket-know cal ed “rocket candy” because of the distinctive smel of the sugar caramelizing as it was heated and absorbed the KNO3. (Funny to think how much of my early rocket propulsion days were associated with food

—oatmeal, Salisbury steak, rocket candy.) KNO3 was the sole component of stump remover—a chemical application homeowners or contractors could use to dissolve tree stumps.

I also became our chief project engineer in the manufacture of pyrotechnic and other explosive devices. ﬀat was mostly due to the fact that my friends didn’t seem as interested in blowing things up as I was. ﬀey were good with the rockets and enjoyed the pyrotechnic displays, but I was interested in seeing how chemicals could react with one another to produce smal -scale explosions.

ﬀat experimentation was a natural offshoot of my rocket engine making.

Working with various compounds like the KNO3 plus sugar formula, I was eventual y able to produce my version of an M80 recracker and other smal er recrackers that produced a loud bang and little more. I tried to mass-produce them for the Fourth of July, along with cherry bombs, and managed to make quite a few, but as impressed as friends were with my efforts, their interest waned. ﬀe laws of supply and demand exerted themselves, but that only tempered my business interests and not my passion for the products and their explosive displays.

I don’t know how much of the other guys’ loss of interest was attributable to the one incident that resulted from faulty handling of the products. I’d taken potassium chlorate and red phosphorous and careful y wrapped them together in a tissue. ﬀis combination is often referred to in the pyrotechnic community as “death mix.” ﬀe reason for that is because the chemicals are friction sensitive and thus very unstable. I’d take that mixture I’d placed into a tissue and then folded it around the shaft of a bolt, sandwiched between two nuts. I’d thread a nut onto the bolt to secure the little explosive package. After you tossed that bolt grenade and it hit the ground, it would erupt in a huge puff of smoke and a loud bang. Once, at Alan’s house, he was standing on the sidewalk that led to their front door. He tried to toss the bolt underhanded toward the street, but it slipped out of his hand, went a few feet back toward the house and detonated near the porch. We spent a good hour cleaning up the front door and porch area in a complete panic as the hour neared for his parents to return home. Fortunately, al the smoke stains came off and no one was the wiser—except us. We kept a safer distance from Alan’s house from that point forward.

Looking back on it now, if that was the worst thing that happened, we were al pretty fortunate. I can't believe some of the stuff I was doing and how it might have al gone wrong if I wasn't as fortunate as I'd been.

AS I SAT IN THE BOOTH OF THE DINER, FINISHING MY PANcakes, I thought about those days from my youth because of the nature of the questions I was asked during my second interview at EG&G. I thought it a little odd that they kept asking me about my hobbies and other interests outside of work. I believed they might want to know more about my training, what I did at Los Alamos, that kind of thing. After al , as I was to nd out toward the end of the interview, they were considering me for a senior staff physicist position. 劒e reality was that my interests outside of work hadn't changed very much since I was a kid. I was stil involved in pyrotechnics. I hosted the Desert Blast for a number of years, setting off a terri c display of reworks each summer. I'd also created a jet car, instal ing one in a Honda Civic I owned, and later put a larger jet engine in a rail dragster. I took my jet cars to drag strips al around the southwest and beyond.

In a very real sense, if it wasn't for my interest in rocketry, pyrotechnics, and my love of science and powerful reactions, I might not ever have had an opportunity to interview with EG&G. Before al that, however, I had to get some additional technical experience. In 1976, my parents had moved to California again. I was determined to take a year off from col ege, but instead enrol ed at Pierce Junior Col ege on a part-time basis. I also got a job working for a company cal ed Fairchild Electronics. 劒ey manufactured equipment to test something cal ed "bubble memory" devices. 劒ink of them as an early precursor of the hard drives that we have in today's personal computers.

Instead of a semi-conductor, the main memory component of these devices was a slice of crystal. 劒e people at Fairchild were absolutely certain that bubble memory was going to be the key to the future of computing excel ence.

Obviously, they were wrong, but at that time, bubble memory was a viable means to store data produced by mainframe computers. 劒e other option was reel-to-reel tapes, the kind you'd see in movies and television encased in

large metal cabinets. Just so you don't think that bubble memory devices were too out there, I can also recal a system of programmable memory that used ultraviolet light in order to erase the data on them. Given how sophisticated our devices are now, this seems impracticable at best and boneheaded at worst.

But those were the times.

I original y worked at Fairchild as a technician repairing broken circuit boards, but eventual y became a test engineer, and later an engineer designing circuit and logic boards. I loved electronics and I was earning money and going

to school at Caltech by this time. I was studying electronics there mainly because the people at Fairchild thought that was the best use of my time. But in my off hours from school and Fairchild, I was working on my own projects at home—lasers had captured my interest and I was working with plasma containment and MHD (magnetohydrodynamics). But I knew that I had to pay my dues and if working with electronics was a way in, then that's what I was wil ing to do. But my desire was stil to become a scientist and leverage my love of physics into a place in the defense industry working on weapons systems. At that period in our history, "weapons systems" meant nuclear weapons. We were stil waging the Cold War, Ronald Reagan was in office, and his proposed Star Wars nuclear missile defense system was stil making headlines.

By the summer of 1982, my feet had grown itchy and my desire to take the next step was too great to keep me at Fairchild. As much as the move to California from New York had initial y been a bit of culture shock, I'd grown to real y like the stereotypical, but true, laid-back surfer dude mentality of the people I worked with. 劻ey had treated me wel , and there I was at the age of twenty-three, working as an electronics engineer even though I was stil a few credits shy of actual y having a col ege degree. I wanted more, so in the summer of 1982, I sent a cover letter and resume to Los Alamos National Laboratory. I spent an anxious few weeks waiting to hear back from them. I'd almost given up hope, but I received a cal one day in September inviting me

down for an interview.

I accepted, and as a part of the interview process, I was taken on a tour of the facility. I knew a lot about its history and the Manhattan project, but the Meson Physics Facility was al relatively new to me. I knew that the particle accelerator was there, but when you read about a device being a half-mile in length, it's hard to truly get the scale of the thing until you're on site. I was in awe. Seeing a Van De Graaff generator the size of smal office complexes took my breath away. 劒e fact that these machines were producing mil ions of volts was absolutely astounding! I was in power heaven. I saw bicycles propped up along various stretches of the runway (for lack of a better term) that ran alongside the accelerator and its associated buildings. 劒e device was so large that technicians and scientists would pedal from one location inside the building to the next in order to save time. How cool was that? I wil never forget looking at one meter and the lowest number on its measurement range

was 110 kilovolts! And these guys were accelerating particles to such a speed that time itself was being affected.

I felt like I had stepped into the world of science ction. I was moving among men and women with an intel ectual capacity that was nearly as great as the power these machines were generating. I wanted to work there, even if it meant that I was going to be working in the electronic monitoring side of things and not conducting experiments. 劒ey also expressed a lot of interest in my work with lasers and during the interview and even after I was hired there was some talk of possibly utilizing that experience at the facility. 劒e odd thing was, as was the case with EG&G, they wanted to know as much about my interests and activities outside of work, as they did my work experience or education.

Also, it's hard to imagine from the perspective of this post 9/11 world we inhabit that the level of security on the facility would seem completely lax today. I was free to roam around the facility on the day of my interview as wel as after I was hired. I was reminded of those days with my dad that we spent at the Hal of Science in Flushing Meadows Queens and Corona Park, the site of the World's Fair in 1964. He'd take me to that museum and I could

wander among the displays, knowing that I was walking along and seeing some of the great moments in human history, intel ectual history, represented before my very eyes. I'm not a big sports fan, but having lived in New York, I know how revered the Yankees are. In many ways, those trips to the Hal of Science and those rst hours and later months and years were like setting loose a Yankee fan on the eld at Yankee Stadium. Not only was I al owed on the eld, I got to play there.

Obviously then, when they made an offer that day for me to work there, I accepted. I returned to California, gave my notice, packed my belongings and within a month was in Los Alamos and working at Meson. I was in for a bit of culture shock there as wel . 劒e employees there, as I said, possessed some of the most powerful scienti c minds in the world. I was used to working with lasers, but these were human beings with a similar kind of intensity and focus.

劒ey weren't exactly like Dennis Mariani. 劒e air of menace he gave off wasn't a part of these people's temperament, but they were similarly serious minded and watchful. Over time, I'd learn that the locals referred to the staff at Los Alamos as the Cone Heads, the alien family from Beldar who were brought to life on the TV show Saturday Night Live. Ironical y, in Los Alamos, particularly

among the staff at Los Alamos, it was general y "Saturday Night Dead." Make that "Every Night Dead," real y. By 6:00 p.m., most people at the facility had their work day over. 劒at part of town was so quiet that the traffic signals al ashed red lights, letting drivers rol to a stop and then proceed one at a time.

My newbie excitement wore off, not just because the place was boring, but because of the kind of arrogance I've mentioned before. Sure, in school I had to endure my fair share of taunting and teasing because of my interest in science and my disinterest in sports. I never thought myself superior to anyone or that I was in any way inferior. I just had different interests. 劒at wasn't the case with a lot of people I worked with and the derision they felt for the rest of Los Alamos, the city, and people in general was more than a

little off-putting.

I also didn’t like working for the federal government. I hated to see the kind of waste of funds and supplies that working with other people’s money produced. In fact, it was our money since we paid taxes like everyone else, but for as smart as these people were, they didn’t always seem to understand that, or at least they didn’t seem to care.

Al of that culminated in me becoming a bit of a prankster, but I liked to think of myself as a prankster with a cause.

As its name implies a particle accelerator gets particles to move at a rapid rate —to the speed of light. Most of what were referred to as the targets—the particles accelerated—had to be cooled to close to absolute zero. 劒at way the atoms and molecules inside them would be essential y inert—not moving. To do that cooling, you need vast amounts of a speci c isotope of helium, helium 3. It is a rare and expensive isotope and we had it brought in by the truckload in special y equipped tanker trucks, which were essential y like scale vacuum thermoses designed to keep the incredibly cold gas as chil ed as possible. Even in a vacuum-sealed environment, helium 3 is boiling off due to the tanks exposure to the ambient temperature. General y, as soon as those trucks rol ed onto the property and to where they were needed, the gas was offloaded.

Except on days when no experiments were being conducted. 劒e trucks stil rol ed in, but they sat there, as the enormously expensive payload they were carrying dissipated into the atmosphere. 劒e trucks would be parked on these radiation shield blocks with six-inch diameter hoses spewing off helium gas. I wasn’t an accountant. I wasn’t in the procurement department. But that kind of waste real y irked me. I mentioned it to a few col eagues and they would

shrug and say, “Hey, it’s government work. 劒ey’ve got deep pockets so why worry about it?”

So I didn’t. Except in my own little way.

One day when the accelerator wasn’t in operation and I didn’t have to

monitor any of the sensors, I was little bored. I saw the trucks outside. I saw a few rol s of the tape we used to cordon off areas or to label any items that might have been exposed to even trace levels of radiation. It was kind of like crime scene tape except is was magenta and yel ow and said, “DANGER

RADIATION,” al along it. I went to a custodian and asked for a few plastic trash bags—the kind that lined the large bins in the cafeteria and not the smal office waste paper baskets. He gave me a box. I went outside and placed a bag over the pipe from which the now no longer super-cooled helium was being discharged. I tied off the bag with the “DANGER RADIATION” tape. I held onto it and I could feel it tugging at my arm, begging to be released. I let it go and watched it climb. 劒at was fun. 劒e second was fun as wel .

I didn’t want to keep al the enjoyment to myself, so I went inside and got my friend and col eague Joe to join me. We spent our lunch break l ing and releasing helium bal oons. Eventual y, we stood there at the end of our lunch hour watching this dotted line of trash bags being carried south of our location on the prevailing winds. 劒e facility sat on a high point and was separated from the main area of the town by a somewhat shal ow val ey. We could see the path they were taking, and, familiar with the area we knew general y where they were heading.

“What are those lights?” Joe asked me, squinting and pointing in the general vicinity of our ight path.

“I’m not sure,” I said. “劒ere’s a quite a few of them. Looks like mars lights.”

“You can’t see Mars from here,” Joe said. He couldn’t keep a straight face and I knew that he understood that mars lights were the ones atop a police car or other emergency response vehicle.

“I think they’re at the McDonald’s,” I said.

“Maybe it was held up,” Joe said.

We headed back inside.

I’ve heard it said that smart people sometimes don’t have common sense. In this case that was true of Joe and me. Not only did we not understand that imperfectly sealed bags would launch and y but eventual y come to Earth, we

didn’t understand the kind of panic that would result when those bags were found to have DANGER RADIATION emblazoned on them. We also didn’t connect the dots between our location, the McDonalds, the ying bags, and the police lights. I can’t say that our little stunt produced a reaction equal to Orson Wel ’s broadcast of the War of the Worlds, but the facility did receive phone cal s about the mysterious appearance of irradiated trash bags. 劒e local authorities were genuinely concerned, knowing that there was likely only one place the items could have come from. 劒ey were not amused, nor was our supervisor, when Joe and I came forward and explained what we’d been up to.

During my interview with EG&G, I did not mention the gasbags. During my remaining time at Los Alamos, I did my best to curb my desire to make life there more interesting for us al . I had no desire to earn myself any more attention than I received. In a way, mine was a futile gesture. I suppose there were more appropriate ways to express my feelings about the wasteful practices.

I also knew that doing so would have been shouting into a very strong and powerful wind that would have drowned my voice out and pushed me back to from where I’d emerged. Stil , I didn’t like feeling as if I was powerless to effect any kind of change—not about the bags and the helium 3, not about my growing sense that what I was doing at Los Alamos was only tangential y related to physics and the kind of work I truly wanted to do.

I’d taken what I thought was a step in the right direction, was grateful to the folks at Meson for sending me to MIT to further my education, but I felt as if I was one of those bags being carried along by the wind, unsure of how I could make any kind of course correction, and a little fearful that my scienti c ambitions might result in me crash landing in the parking lot of a McDonald’s, de ated and warning others of a danger that didn’t exist. Lazar Energy Systems had been a step in the right direction, and if things had

turned out differently, I may have kept that out t running for many, many years.

In many ways, with Carol's death, the loss of various business interests and my interest in them, I had been drifting for a few years. Certainly not to the extent of those bal oons, but as the last year of the 1980s approached, I had been wondering about waste—of my time, my knowledge, my passion. ꝏat was why I'd decided to send out those resumes and cover letters. As it turned out, though, my time at Los Alamos wasn't a waste by any stretch of the imagination. Sometimes it pays to go to class and to listen to lectures. ꝏe

payoff may not come for years. Along with that, though, comes another kind of lesson—be careful what you wish for.

CHAPTER

TWO

TO GIVE YOU SOME IDEA OF HOW SLEEPY THE CITY of Los Alamos can be, in June of 1982 a reporter from the local paper, the Los Alamos Monitor, contacted me. He identi ed himself as Terry England, told me that he was a staff writer for the paper, and he wanted to interview me. He'd gotten word that I had a jet-powered car. I agreed to talk to him, never guring that the eventual story would wind up being on the front page of the Sunday paper on June 27th. I'd make some crack about it being a slow news day and he needed a fast story, but that would be too easy. ꝏe writer appeared to be as interested in the fact that I came from California to work there and stil had vanity California plates on the Honda Civic that read, "JET-U-BET." I know for a fact he was also extremely interested, or perhaps distressed is a better word, when Carol and I drove the car, using its conventional gasoline engine that stil functioned in its usual place in the engine compartment at the front of the vehicle, to take it to the Pueblo High School parking lot. ꝏere, I red up the jet engine for him and it howled like you'd expect a jet engine to. He stood there with his hands pressed to his ears, the pages of his notebook uttering and threatening to take off. I explained to Mr. England that the sound waves coming out of the nozzle, which was exposed by pressing a switch that

dropped the rear license plate out of the way, were synchronized with the intake, producing a fairly substantial amount of noise.

Starting it up for him a few times garnered us more attention that I would have otherwise wanted—a man drove over from another neighborhood a few miles away, and a police squad car from Los Alamos county showed up. 劒e officer was nice and simply asked me to not do any more demonstrations due to the number of complaints.

劒e next week, the jet car and I got the attention of a man I never thought in my wildest imaginings that I would ever speak with. Edward Tel er was back in Los Alamos, from the Lawrence Livermore National Laboratory, to deliver a

lecture. I was excited by the opportunity to get to see and hear the man who was credited with being the father of the hydrogen bomb. Of course, given my interest in nuclear arms, I knew about him and was eager to hear him speak.

Even if he hadn't been a part of the Manhattan Project, he had an extraordinary career. Born in Budapest, he left his home country to be educated in Germany. He earned a PhD in physics under the renowned scientist Werner Heisenberg.

Heisenberg, of course, was awarded the Noble Prize in physics in 1932 for his creation of quantum mechanics. Even today, mention Heisenberg's name and people with only the most rudimentary understanding of the history of physics in the last hundred years wil know at least about his "uncertainty principle." One of the biggest problems with quantum experiments is the seemingly unavoidable tendency of humans to in uence the situation and velocity of smal particles. 劒is happens just by our observing the particles, and it has quantum physicists frustrated. To combat this, physicists have created enormous, elaborate machines like particle accelerators, such as the one I was hired to work with at Meson, to remove any physical human in uence from the process of accelerating a particle's energy of motion.

Stil , the mixed results quantum physicists nd when examining the same

particle indicate that we just can’t help but affect the behavior of quanta, or quantum particles. Even the lights we use to help us better see the objects we’re observing can in uence the behavior of quanta. Photons, for example, the smal est measure of light, which have no mass or electrical charge, can stil bounce a particle around, changing its velocity and speed.

To be able to hear a lecture by a man who studied with Heisenberg was a real privilege and one that I couldn’t pass up. I also knew that Tel er had studied under Neils Bohr while spending a year in Copenhagen. Bohr is another giant among scientists, in my mind, and in the mind of many others nearly as important a theoretical thinker as Albert Einstein. In 1935, Tel er took a position at George Washington University where he worked as a theoretical physicist. Eventual y Tel er’s attention turned to nuclear energy, both ssion and fusion. In 1942, as the US involvement in World War II ratcheted up, Tel er took part in Robert Oppenheimer’s planning seminar at the University of California, Berkeley. From that summer meeting, the Manhattan Project got its start. Tel er began his work on the development of a nuclear bomb at the University of Chicago, eventual y heading a group at Los

Alamos in the 劻eoretical Physics division. He was a big proponent of developing a hydrogen bomb (thus the nickname he claimed he didn’t like) and that created some friction within the top level of scientists working on the Manhattan Project. Under pressure from the government and military to develop a nuclear bomb as soon as possible, Oppenheimer and others eventual y created the two bombs that were dropped on Japan. Little Boy used enriched uranium. Fat Man used plutonium.

It wasn’t until 1952 that the US successful y detonated a hydrogen bomb.

One thousand times more powerful than what the Manhattan Project had developed, a thermonuclear as opposed to a conventional nuclear device, the hydrogen bomb was a truly frightening advancement in weapons technology.

Many said that its development accelerated the arms race and heightened the Cold War tensions between the US and the USSR. 劻at’s true, but as a scientist, I could see why Tel er had advocated for its use. When you’re

charged with producing the ultimate weapon, and you see how one can be made practicable, you advocate for it. By the time Tel er was back at Los Alamos, he'd gained and lost notoriety and reputation among certain members of the scienti c community. His advocacy on behalf of the Strategic Defense Initiative, what most people knew of as the Star Wars defense, a system combining ground-based units and orbital deployment platforms to destroy incoming nuclear missiles, lost him favor in some scienti c circles. Some stated that the long-standing nuclear policy of "Mutual y Assured Destruction" was working. What the SDI might do is be seen by the Soviets as an escalation of offensive practices and not as a defense.

In hindsight, given the col apse of the Soviet Union, it al seems to have not real y mattered, but at the time, nearly the entire 1980s, the debate raged. In truth, we didn't have the technology to implement the proposal, but in my mind, that didn't mean that we couldn't develop it. Since Tel er spoke on behalf of the plan, he was considered to be a kind of cock-eyed optimist about our scienti c capability, more of a salesman of a plan, than someone who had real y arrived at a workable solution. (In fact, a Scienti c American article that several prominent scientists wrote said that any of our enemies could launch decoys for a fraction of the cost of our SDI system and wreak havoc on us with a fol ow up of actual missiles.) Tel er didn't help himself by stirring up controversy throughout his career, even at one point, testifying against

Oppenheimer when the man many considered a hero was being subject to a security clearance investigation in the 1950s.

Al that taught me was that science and politics didn't real y mix, huge egos often clash, and it would be better to toil in anonymity doing something you real y enjoyed than to be mixing it up with the bigwigs in Washington, DC, and elsewhere.

I arrived at the site of Tel er's lecture a few minutes early. A few people sat in the hal waiting. I decided to linger outside and enjoy some sunlight and fresh air. I enjoyed the nice break from the arti cial light and the stale air inside the facility. We'd al heard rumors of how the Lawrence Livermore

National Laboratory was run much more loosely. One article I read characterized Los Alamos as the Ivy League, al tweeds and ties, while Livermore was the counterculture, if not hippies than at least rule-breakers and risk-takers. In a way, I identi ed more with them than I did with Los Alamos and its conservatism.

I was hoping that Tel er was going to speak about his Excalibur project, the precursor (or some said inspiration) for the Star Wars system. Tel er had envisioned a device that would orbit in space, a spherical machine that would have elements sticking out of it, kind of like a sea urchin. 劒ose elements would be ber optic light guides to aim and focus immensely powerful X-rays that could evaporate the metal casings of Soviet ICBM missiles after they were launched. I would have loved to have been a part of the development team that worked on Excalibur, but even just hearing about it would have to do for the moment.

I took a seat on a bench outside a study area in the administration center.

Above me, a series of portraits of Nobel Prize winners who'd worked at Los Alamos at one point or another in their career ran along one wal . In some ways, it was like being back in high school, though instead of varsity letter winners being commemorated, it was scientists. Across the way from me sat a man with an expansive broad nose and eyebrows that reminded me of a mink stole draped over a woman's shoulders. His heavy lidded eyes were deep set and focused on a newspaper he was reading. I recognized him immediately as Edward Tel er.

I wasn't starstruck at al , but I did want to meet him. I stood and walked over to him and put out my hand, "Dr. Tel er, my name is Bob Lazar, it's a real pleasure to meet you."

Tel er looked at me over the edge of the paper, and said, his voice thick with an Eastern European accent, "Why, thank you."

He made no move to drop the paper and to take my offered hand. Feeling a bit awkward, I watched as his eyes focused on my face and then he turned his head slightly to the left as he squinted more forceful y. He looked down at the

paper, closed it and then folded it so that the front page was visible.

“You’re the man with the jet car,” he said. He stabbed at the paper with my photograph on the front page.

“ffat’s right, I’m Bob Lazar. ffat’s my car.”

“Lazar? I once studied with a man named Lazarev. A Russian. I believe the surnames are related. Might he have been a relation?”

I didn’t tel him that I didn’t know what my real surname was. I simply said,

“I doubt that.”

We spent a few more minutes talking. He seemed quite taken with the idea of me having instal ed a jet engine in my car. ffough I wasn’t applying rocket science in the ways that he was dealing with, he seemed both amused by and impressed with the application. He asked me what else I had planned on doing, but I wasn’t able to answer. One of the staff members came and escorted him away so that Tel er could begin his presentation. For whatever reason, Tel er must have remembered me—whether it was our conversation, my jet car, my last name—I’m not certain. When it came time for me to send out query letters to get a new job, I wrote directly to him. He was stil with Lawrence Livermore, but it seemed less and less likely that Star Wars was ever going to come to fruition. Various treaties limiting nuclear arsenals had been agreed upon. In a lot of ways, the nuclear weapons industry was contracting, but I hoped that my attempt at networking would at least get me some attention.

As it turned out, I got a job as a result of that meeting with Tel er and, later, a whole lot more attention than I ever wanted or needed.

I was, of course, blissful y unaware of al that, when, two days after my rst visit out to EG&G’s remote site at Groom Lake, I got another cal to report for work. ffe routine was much the same. Get the phone cal , get to EG&G, get on the plane, and y out to the base. ffis time though, there was a difference.

When I arrived, I was the only one on the bus except for Dennis. 劻is time, instead of remaining on the main base and proceeding to the administrative area, as I'd come to think of it, we headed south along a packed dirt road.

Within minutes we were in the desert. With the blacked out windows, I couldn't see much to the sides of me, but it was likely what I was seeing in front of me through the frame of the front windows—a few rol ing hil s, sand, a smattering of creosote bushes, greasewood and cactus. We traveled for nearly forty minutes, covering approximately ten miles, the bus headlights sending out a ickering semaphore as we rattled over the corrugated sections of the road.

Eventual y, we slowed and came up to a rather large hil . Above the loose pile of dirt and stone, a spire of rocks with the characteristic desert varnish darkening their surface sat like a broken jaw and teeth above it. As we moved left around the hil , it was as if someone had taken a giant shovel and squared the face of the hil at 90 degrees to the ground. To one side of that perpendicular rise stood a smal entryway. Dennis led me inside the building and into a smal 12 x 12-foot room that was completely unadorned and unfurnished. 劻e only thing inside it was what I looked like a stand-alone ATM machine you might nd in a convenience store. Dennis walked up to it, and put his hand on a glass platen. He splayed out his ngers and some kind of optical scanner or reader lit up from above. Next, he typed in a few pieces of information on a smal keypad. A moment later, his identi cation badge dropped into a slot at the machine's base. I repeated his actions and my badge popped out.

"劻at is yours. You'l need to have it on your person at al times. It's both your identi cation card and your key card." He nodded toward the door.

Alongside it, a smal stainless steel plate clung to the wal . "Without this, you won't be able to go in or out."

I immediately understood that with such a system al of my movements within and between rooms and buildings could be tracked. Not unusual for any kind of facility dealing with sensitive information.

We walked toward a second door. Dennis nodded toward the plate.

“Try it.”

I swiped the key card and then heard a click as the latch was released.

Dennis gestured for me to lead the way, and I stepped into a wel -lit corridor. I immediately felt like I was back at Bowling Green Elementary School. I smiled to myself and wondered if the one of the colors on the wal s or cinderblock was in, in fact, known as Bowling Green. 劒e light green of the drywal and the darker green of the cinderblocks that rose to about waist height were the

typical institutional green that I’d seen in countless hospitals and municipal buildings and schools. I tried to remember something I’d once read about the psychology of color, how green was supposed to react with our central nervous systems, but couldn’t remember if it was calming or energizing and what any of that might have to do with being green with envy.

Al I knew was that the corridor was very long, and it seemed as if it stretched along to the vanishing point in a long and narrowing row of doors on either side. 劒e hal way was empty and the building nearly silent except for the clicking sound of our heels. Dennis stopped abruptly after just a few paces. He nodded his head to the right, “In there.”

Unlike the other doors, this one didn’t require me to use the keycard. I simply turned the knob and stepped in. Once again, I found myself in what seemed to be a waiting area of some kind. A few upholstered chairs sat along one wal and an office desk sat in roughly the center of the room. Alongside it, a two-drawer ling cabinet the color of un nished brass sat with an English ivy plant and its tendrils draped along and down its anks. A water cooler in the far corner of the room belched and bubbled before quieting. Before I could decide, or Dennis could indicate, that I should take a seat, another door opened at the back of the anteroom. A petite brunette wearing a bright red cardigan and black pants entered.

She smiled brightly and the room lost much of its cool indifference.

“Would you like to fol ow me?” she asked.

I knew she wasn’t asking a question, but I appreciated her being far less curt than Dennis was.

“Absolutely,” I said, not quite matching her enthusiasm but nearly.

“We’l need about thirty,” the woman said, rising on her tiptoes and angling to the side to speak around me to Dennis. She held a clipboard folded in one arm and resting against her chest. Once I got into the room from which she’d come, I knew what was next. A smal examination table, a series of glass fronted cabinets, a scale, and the other accessories you’d nd in a typical doctor’s office exam room clued me in.

“Would you like to take a seat?” she asked, and I wondered brie y if this was going to be a recurring pattern, if we were going to be playing an odd sort of game of twenty questions.

“Sure,” I said. I sat on the examination table, feeling and hearing the rough paper cover shift as I did so.

I watched as the young woman moved past me. I noticed that in one corner of her eye, she had a faint mole that intensi ed the deep brown of her eyes.

Once out of my line of sight, she must have opened a drawer. I heard the metal ic clatter of things being moved about. When I saw her next, she had a stethoscope draped around her neck and she was tugging at the Velcro off a sphygmomanometer sleeve.

“Could I get you to take your shirt off?”

I was wearing a white oxford cloth dress shirt and a t-shirt. I undid the buttons and then shrugged out of the garment.

“May I?” she asked. She held out her hand and I gave her the shirt. She hung it from a hook on the back of the door. Sixteen more questions and we’d be done, I thought.

“Can you hold out your right arm for me?”

I did as instructed. She slid the blood pressure cuff on and began to in ate it. “Any sign of rain out there?” she asked, “I thought that maybe we’d get lucky. I’m heading out to Death Val ey this weekend with my boyfriend. I’m hoping the desert bloom wil be beautiful. One of my favorite things.”

“I hope I’m not heading to Death Val ey soon,” I said.

She laughed, “Not according to this,” she said as she held the gauge out to me, “One twenty four over eighty two. Can I get your heart rate?”

We did a few more typical and cursory medical examination things to be sure my hearing and eyesight were okay. Without my glasses, I told her, I’d be lucky to see the chart let alone any of the letter on it. After that, we turned to what seemed to be the real reason for my being examined. After reading through a list of potential al ergens—I’d lost track of the number of questions but was pretty sure we’d gone beyond twenty—she asked me if I was left-handed or right-handed. When I answered that I was right-handed, she said/asked, “Wel , then let’s have you do the left arm, okay?”

She retreated behind me again and returned with a smal clear plastic case that was subdivided into compartments. She next produced a felt tip marker.

Holding my wrist gently, she turned over my arm so that the bottom of my forearm was exposed. She swabbed the area with alcohol and then drew a neat grid on it producing a series of sixteen uniform sized squares. I was quite impressed with how symmetrical they were given that she’d done it freehand.

She shrugged off my compliment, “Done this dozens and dozens of times.”

Once she was done with the drawing, she retrieved a rol ing stool and drew it alongside the table. She cranked a lever and rose up so that her head was nearly level with mine.

She looked at me and then shook her head, “Sorry.” She retrieved the plastic case and placed it on a rol ing table like the one dental hygienists use.

“Okay? Now. One the reasons you’re here is so that we can do a baseline al ergy test. What we’ve discovered is that some people working here get exposed to elements in the work environment that produce, in some cases, strong systemic responses. So, what I’m going to do is use one of these,” she held up a smal device that resembled a pushpin, “To place a smal amount of different chemicals subcutaneously on your arm. I’ve got the grid there, and I’l know which, if any of these, produce any kind of reaction on your skin.”

“What kinds of things are you testing for?”

“ere could be redness. Swel ing—”

I cut her off, “I’m sorry. I didn’t quite ask the question properly. I know what the al ergic reactions may be like. What are the al ergens you’re testing.”

She frowned and let her shoulders slump, “I’d like to tel you but I can’t. I real y don’t know. Al I was told is that you, and a lot of other people here, wil be working with,” and here she used her ngers to form quotation marks,

“‘exotic materials.’ What those are speci cal y, I haven’t been told.”

“Do you know if there have been any serious consequences of that exposure?”

“Can’t say.” is time her tone rose only slightly at the end as if she was questioning whether or not she was asking a question.

For my part, I was very concerned. is was a high tech lab, after al , so who knew what kinds of materials I might be working with? Better safe than sorry.

After she’d done the pricking of the various areas, she returned with a smal plastic container, the kind that hospitals often use to place a patient’s medications in. A faint yel owish liquid was inside, just a couple of ounces I estimated.

“Can you drink this?” She held it out to me while she made some notes on

her chart.

I took the cup and brought it toward my mouth. I immediately thought of the household cleaner Pine-Sol. I drank it down and felt my eyes tear up

brie y.

“What was that?” I asked.

“Not so bad, was it?” she asked. “Just another part of the testing.”

She snapped the plastic case shut, and said, “We’re al through here. Good luck with your work, and again, please be sure to monitor those test sites and if you notice anything unusual, let us know through your supervisor.”

劒e nurse handed me my shirt, and I while I put it on, she went out into the anteroom. By the time I’d nished dressing and gone out there, she was gone. Dennis was nowhere to be seen either. I stood in the hal way for a few moments, thinking about the al ergy test and what it might mean for my future employment. I was stil waiting for the Majestic clearance needed to become a ful time employee. I had no reason to doubt that I’d receive it, but I also knew that wheels often turned very slowly in these matters. I was accustomed to hard work, having multiple responsibilities, but stil it would have been far more desirable to be able to shut down the photo business entirely—sel ing it off—and resume a more normal kind of nine-to- ve existence.

A part of me real y enjoyed the less structured schedule that my involvement in photo processing afforded me, but, of course, that came with certain trade-offs. Tracy and I were doing ne nancial y, but having to make myself available on an on-cal basis for EG&G and in essence for the photo business could wreak havoc with a social life and our personal schedule. I knew that it was going to be temporary, but how “temporary” that was going to be was difficult to say. I knew that stress played a role in how our immune systems operated and responded to pathogens. Would my current mental and emotional state have an effect on the grid of substances that had been introduced into my forearm?

I didn’t have a long time to re ect on the matter. I don’t know how I missed seeing him at rst, but Dennis was just down the hal way from me.

“ 劒is way, Bob.” Dennis rarely used my name in our conversations and for as common as my name is and for as many times as I’d heard other people use it, it sounded strange coming out of his mouth.

I fol owed Dennis as he entered another unmarked door into another smal room—this one even less spacious than the one where I’d been issued my ID

keycard. Dennis gestured toward a smal office desk, a metal framed affair with a cheap wood laminate nish. On the desk sat a stack of blue le folders. I

took the seat behind the desk and noticed that the folders were blank, that is, there were no labels on the on the folders themselves to identify EG&G.

Dennis stood just inside the closed door and said, “It’s important that we get you caught up as quickly as possible about where we’ve been and the direction the project is going in. Given your present clearance level, these brie ngs should give you the background information you need. Obviously, this is al con dential information. Once your clearance is upgraded, you’l learn more.”

He paused and thrust back the cuff of his suit jacket and shirt to consult his watch, “I have a number of other tasks to attend to. Do your reading here, and when I’m done with those other matters, I’l come and get you. Any questions?”

He barely paused before saying, “Good. I’l be back.”

劒e stack of folders was nearly a foot high. 劒ey were of various thicknesses, none containing any more than what seemed a dozen pages. I gured it best to begin at the top and work my way down. I opened the rst folder that was labeled “Overview.” 劒e title page had nothing more on it than the words “Project Galileo.” 劒e prose was typical government plain speak, a kind of “just the facts” sparseness that suited me, especial y given the stack of materials I was to read and having no indication at al from Dennis when he

might return.

The short first paragraph would have pleased me except for the inclusion of one word—"extraterrestrial." It explained that the purpose of the program was to back engineer—the process by which you take knowledge or information from anything man-made and re-produce it or produce anything based on the extracted information—a propulsion system of an extraterrestrial craft. The power and propulsion systems of the craft were of the highest priority.

For a second, I stopped reading and considered just what was meant by

"extraterrestrial." One thought I had was that EG&G, or whoever had authored this overview and whoever had approved it for distribution, was being either very precise or very loose with their use of language. Something that is considered to be extraterrestrial means that it is of or originates from outside the Earth or its atmosphere. Maybe, in the language employed at EG&G and out here at Groom Lake, the experimental craft they are presumably working on, get referred to that way since traditional nomenclature—a plane, a jet, or names for other land-based vehicles didn't

quite fit with the scope of the craft's capabilities or intent. I knew how many scientists thought, and if this was something that a scientist or engineer had written, and it was intended as an in-house document, then the use of a potentially loaded word like that wouldn't be so odd.

On the other hand, I thought that maybe this whole document was another form of a test. I was still, in a sense, on trial with the organization. I'd been subjected to all those other questionnaires that dealt with personality and temperament, and maybe this was just a part of that larger assessment. Was I someone who would get frustrated or annoyed by references that were seemingly off topic? Would I be willing to wade through information or data that was seemingly irrelevant or confusing and not be able to plow ahead or keep an open mind.

I decided to do precisely what I thought they wanted me to do—to keep reading and not form any judgments until I had the bigger picture formed in

my mind.

As I read on, a few other things became clear. ﬀough no dates were given, it was clear to me that the project was not in its infancy. Some references were made to past attempts to understand the nature of the power and propulsion system. Several attempts had been made to reproduce the kind of system that had come into their hands, but with no success. Given what I knew of back engineering, it often involves disassembling something and analyzing its components and workings in detail. Any kind of propulsion system is likely to be highly complex and the disassembly and production or fabrication of new components could take a considerable amount of time.

I next read that a previous attempt to dismantle one of the existent propulsion systems had resulted in an accidental explosion. ﬀe document didn't go into much detail about that "incident," but I also knew that any time there was an accident like that, there would be a period of time when the work was halted, an investigation initiated, and only after a review process of the procedures—something that could have taken place in months or perhaps years—work would then commence. Reading a bit more made it clear to me that something like the process I'd imagined had taken place. ﬀe last bit of the overview dealt with the present reality. ﬀey were going to deemphasize the dismantling efforts and focus instead on other kinds of analyses to determine how it functioned. What those types of analyses were to be wasn't speci ed, but one other thing was made clear as a priority. We—it was a bit

presumptuous of me to include my not-yet-ful y-cleared self in this—were to duplicate this technology using existing materials and not utilizing what the brie ng referred to as "exotic" materials.

None of what I read set off any alarm bel s. I was pleased to read about the nature of the work. It would be a real chal enge to take on the task that was set before me. What types of analyses could we devise to understand the nature and function of a propulsion system without having the ability to dismantle the existing, and presumably, functioning system? After al , in my mind, the word "analyze" means to break down into component parts to see how they interrelate. When you're working with a physical object, or a set of

physical objects in the case of a propulsion system, not having the capability, or in this case the task, of seeing how those component parts al t together, was like working with one hand tied behind your back. We'd have to devise new approaches, and I wondered then if that was why I'd been hired.

Frequently, when a team is at a sticking point, it helps to bring in someone new who hasn't been through other parts of the process. I could look at things with a fresh set of eyes and none of the preconceptions, or at least a different set of them, from the other scientists already at work.

Stil , as I returned the pages to the folder, the one question that kept coming back to my mind was what the hel these guys were up to. Was this just a test of my temperament and suitability to work in this environment, or was this reverse engineering of an extraterrestrial propulsion system a real work assignment?

ꠇe last sections of the Overview also cast some shadows of doubt on the whole enterprise and made me think that this had to be a kind of screening mechanism. If you could put up with this kind of disinformation, then let's see how you feel about working under these restrictive conditions. Project Galileo was comprised of a number of divisions—the power/propulsion team, and those that dealt with navigation, control, metal urgy and other component elements of a ying craft. ꠇese groups were not to work in concert, as you might expect, but were to be segregated. Not only wouldn't they work together, they were not to share information with one another. No communication between the work groups was al owed. If we had questions that we thought needed to be answered, we weren't to go to any other team members directly. A clear chain of command was in place, and it was a condition of our employment that we not share information with anyone other than our work

partner. Failure to adhere to the security rules was grounds for immediate dismissal and potential prosecution.

Interestingly, some of the other brie ngs dealt with the other teams: Project Looking Glass dealt with the materials side of the craft, and Project Sidekick

was exploring the possibilities of the craft’s weaponization, but only in the most generic of ways. For example, I learned that the bulk of the craft was manufactured from the same material. Tests had shown that it was not metal ic in origin nor was it ceramic. 瓚at intrigued me. 瓚ink of your car and how many different materials are used to produce its various components, aluminum, steel, glass, rubber, various plastics. And here was an object that was claimed to made of a single material?

I can’t claim to be completely logical. I was a trained scientist and I was supposed to look at things with as much objectivity as possible. I found myself veering between two points—rejecting what I was reading out of hand as an attempt to use a ctional scenario to determine my suitability for some highly con dential project, and being caught up in the excitement of being exposed to new ideas that would test the limits of my understanding of the nature of things here on Earth. Or maybe the test was even simpler. 瓚ey presented this scenario to me to see if I was going to share it with anyone. 瓚ey could do al kinds of background checks, but the surest way to see if I was capable of keeping information con dential was to provide me with a story and see if I kept it to myself.

I brie y scanned the room, wondering if I was under surveil ance in there, and if my eye rol ing at some of what had been revealed to me might determine the fate of my employment.

For a few moments I considered the possibility that this craft, or maybe a better term was this “technology,” came from somewhere other than the United States. We were stil dealing with the effects of the Cold War, and perhaps we’d managed to gain control of some Soviet technology. Whether we had stolen it, had someone present it to us, or in some other way gained possession of it didn’t real y matter. What did matter was that we had it, apparently didn’t real y understand ful y how it worked, and it was to be my job to determine how it functioned and how we could reproduce it. I’d wanted to be involved in working with nuclear weapons, but maybe this was an even more worthwhile task. Maybe this technology would prove to be the key to

what seemed to be the dominant, and ominous, political philosophy of the day

—Mutual y Assured Destruction.

Even in hindsight, it is difficult to come up with a coherent explanation of my thoughts and feelings at the time I was reading those documents. I can say this with real clarity, however: I was thoroughly engaged in the reading—not by its language, but by what it offered as a possibility to utilize my interests and abilities. If this was al a game, a way to determine if I was cut out for the work, then how could I strategize and make the right moves to get to the end point, to be hired ful time by EG&G? If what I was reading were true, that there was some extraterrestrial craft that we had in our possession, then I’d have to manage to accommodate a fundamental shift in my thinking, recalibrate, and proceed to the task at hand. In either case, it was al about the job in that moment. And for now, the task that was at hand in the immediate was to read more of the brie ngs.

I picked up a folder marked “Biology.” As I scanned the rst page, I was again torn in several different directions emotional y and mental y. 劒e le identi ed the place from which the extraterrestrial craft originated. It stated that the craft came from the planet Zeta Reticuli star system. I wasn’t familiar with the name, but the brie ng went on to add that the constel ation was located

some 39 mil ion light years from Earth. It was only visible from Earth from positions in the Southern Hemisphere.

ꠇe most obvious question was how could that craft have gotten here? Even if we could travel at the speed of light, approximately 186,000 miles per second or 671 mil ion miles per hour that meant it would take 30 years to get there. ꠇat's a ridiculously long period of time even at that great speed and an unfathomably long period of time based on 1981 technology, and the fastest we could then travel through space. I couldn't even begin to imagine how much fuel would be needed to propel a vehicle that far, how life support systems could function and replenish, how food supplies could be sufficient, and al the rest. It just boggled my mind.

ꠇose questions paled in comparison to the considerations that came to mind when I turned a few more pages in the le. I got to a pair of black-and-white photographs reproduced on regular copy or printer paper. One was a relative close-up of a humanoid organism. ꠇe photo encompassed what seemed to be the torso—no head was visible and nothing below what appeared to be the midline or waist. I could see just the stub of where a human arm

would project from the torso. ꠇe rest of that limb was out of the frame. ꠇe same was true of the lower extremities. I could see just the suggestion of a pair of legs—a protrusion roughly where you'd nd the hipbone of a human, more speci cal y the crest of the ilium, rising from the gray-white skin.

What most distinguished the photo was the classic t-shaped incision that ran nearly the entire vertical length of the trunk, with a far shorter horizontal line at the top of that major cut line. ꠇe skin had been pul ed back revealing, if the subject had been human or an animal, a series of speci c organs of respiration and digestion—lungs, heart, kidney, liver, bladder, etc. Instead, what I saw was an undifferentiated mass of tissue that l ed the majority of that cavity. ꠇe second photo was much the same as the rst, but it was smal er and in the white space that surrounded the photo on the page, it appeared as if several different people had added their notes. ꠇese annotations were in different handwriting, but they mostly expressed the same sentiment: how unusual it was to see this large central mass, and speculations about how it

might function to perform the various specialized tasks that our human organs do.For some reason, the inclusion of those notes from others realy got my head spinning at a greater rate than before. Why would they—and to this point I had no clear understanding of who “they” were—include those notes in the brie ng materials? What was the point of that?

I can see now that this seems like a minor question compared to the bigger issues these photographs and the information about Zeta Reticuli engendered.

I was so wrapped up in what I was reading, so overcome with a kind of information overload that my mind xated on a point independent of my own wil . Maybe subconsciously my brain kicked into ght or ight mode. It sensed that this information could have done me some kind of harm, confused me to the point where I was in danger of losing touch with what I understood to be reality. I knew that from the time I rst opened the pages of that rst folder to viewing those photographs and reading the brief account of the planet from which the craft originated, I’d experienced something that had happened to me many times before. 劒e passage of time hadn’t been a part of my conscious awareness. I could have been reading for ve minutes or ve hours. I was so wrapped up in what I was reading that time had become irrelevant. I know that comparing the human brain to a computer and its operating system is a gross oversimpli cation, but the only way that I can

think of to describe the state I was in is to say that information was being downloaded and I was in the process of formulating a vast number of questions. Because I was stil acquiring more data, and wanted to, I didn’t have the time to pose al of those questions to myself. 劒ey were being stored and queued up. Who I would ask, and what the answers might be wasn’t something I knew as I sat there trying to assimilate al that I was reading into a coherent whole. I was failing miserably at that task, but was hopeful that at some point, I’d be able to put al those pieces together.

CHAPTER

THREE

SOMETHING CAUGHT MY EYE AND I LOOKED UP FROM reading.

꠸rough the door’s smal rectangular window spider-webbed with wire, I caught a brief glimpse of someone out in the hal way. A few seconds later, I heard the electromechanical sounds of the door’s latch being released.

“You can leave those there. ꠸ere’s someone I’d like you to meet,” Dennis said from the doorway. He edged into the room and a uniformed security guard slipped past him. He bundled up the les and strode off. He didn’t make any attempt to count them or inspect them and that made me wonder again if I had been observed the whole time I was in that room.

“Fol ow me,” Dennis said. I did as instructed. We stopped in front of a door just a few spots down from where I’d been reading the brie ng papers.

Dennis carded us in and before we could enter, a security guard exited the room. Once inside I could see that we had entered a laboratory. A man was seated on a stool at a long workstation. When the saw us, he smiled broadly and walked toward us.

Dennis made the introductions, letting me know that my work partner was named Barry Castil o. He was an inch or so shorter than I, thin, and with an olive complexion and a shock of brown curly hair that he had the habit of running his ngers through whenever he spoke. Other than each of us saying,

“Pleased to meet you,” we were silent until Dennis left the room.

His parting remarks were simple and straightforward, “Barry wil bring you up to speed. ꠸is is propulsion lab and you’l be spending most of your time here. He’l advise you on what your task assignment is, the goal that you’re expected to achieve. I’l leave it to you gentlemen to get started. I’l see you both later on this morning.”

As soon as Dennis left us alone, Barry eyed me, and said, his eyes sparkling,

“You’re not one of them are you?”

“I don’t think so,” I said.

“Military, I mean,” he shook his head and waved both hands in front of him. “Forget that. I can tel . I mean, no disrespect, it’s just that I can tel that you’re —wel , you’re normal.”

I laughed softly. “I was thinking the same thing about you. As soon as Dennis let me in here and I saw you, I was like, ‘飏ank, God. Somebody I can actual y have a conversation with.’”

“I know what you mean.”

Barry grabbed my biceps and said, “You’ve got to see this stuff.”

I had that laundry list of questions I wanted to ask him about the brie ngs, but Barry’s enthusiasm was so infectious that I let him lead me to his workstation. Sitting about fteen feet from his high stool was a cylinder about the size and shape of a household garbage can. It was pewter in color and both from a distance and upon closer inspection it seemed to have no seams, no welds, no fasteners, no sharp edges, no marks on it at al . I saw nothing that hinted at how it had been manufactured. It didn’t appear to have been cast, machined, molded, formed, or joined.

“飏is is one of the emitters,” Barry said to me.

“What does it emit?” I asked, setting aside again the dozens and dozens of other questions about what I’d just read.

“I’l show you in a second,” Barry said, sounding very much like an excited teen wanting to show off al the components of his stereo system before letting the music blast away.

On the desk surface of Barry’s workstation sat a half-sphere of the same color and material. It was roughly the size of a basketbal and sat on a one-inch plate, again of the same composition as the other two pieces—or so I surmised based on a quick look at it.

“飏is is the reactor.”

Barry lifted the half-sphere and exposed a smal tower-shaped object inside.

It was approximately six inches tal and, as was true of everything Barry showed me, seemed to have been whol y formed through no process that I'd ever seen or read about. Sitting atop the tower was a cap—like al the other surfaces, it had a rounded or radius corner instead of a 90-degree edge. Barry retrieved a smal triangle-shaped disc from a metal box and placed it in the top of the tower. He replaced the cap, put the half-sphere back on the base and stepped over to the emitter. He pushed it a few feet toward the reactor.

"Watch this," Barry said. He extended his arm toward the half-sphere but before his arm could reach its ful extension, his hand moved back toward his upper body.

He looked at me expectantly, and I felt bad that I didn't share his enthusiasm in that moment. It simply looked like he just extended his arm as if to shake someone's hand and then withdrew it.

"Better yet," Barry said, stepping to the side, "feel this."

I stood in front of the reactor and did as Barry had done. When my hand got within approximately eight or nine inches of the devices, I felt myself being pushed back by some unseen force. If you've ever had the use of two fairly powerful magnets and put them so that two of the poles are placed near one another to produce a repel ing effect, that was very much like what I felt.

"Antigravity," Barry said. "Can you believe it?"

"I read about that in the brie ngs," I said as I continued to test the eld being produced. "I skimmed over that portion guring it was part of some joke or something else. I don't know what. . . ." My voice trailed off. Like anybody who was interested in science and who grew up in the era that I did in the 1960s, antigravity was a concept with which I was familiar from watching science ction shows on television or in lms. And for the most part, that was where the notion of the existence of antigravity resided. Every schoolkid learned about Sir Isaac Newton and his discovery of gravity—one of the four fundamental forces at work in the universe. (劒e other three are

electromagnetism and the strong and weak nuclear forces.) According to Newton, gravity was an external force transmitted by some unknown means.

Antigravity, as its names implies, is the opposite of gravity: a hypothetical force by which a body of positive mass would repel a body of negative mass.

ﬀe key word there is, of course, “hypothetical.” No one had been able to prove that it actual y existed. When Einstein came along with his theory of general relativity, gravity was not considered to be a force, but a result of the geometry of space-time. Simply put, that theory offered no real hope that antigravity existed. Quantum physicists postulate that gravitons exist as a subatomic particle. ﬀese are massless elementary particles that transmit the force of gravity. How they could be created or destroyed is not yet clear.

We tend to think in terms of opposing binaries—light and dark, long and short, and so on. So it seems logical to us that if gravity exists, its opposite must as wel . ﬀat’s why going back as far as H. G. Wel s and his book 扪e

First Men in the Moon, published in 1901, we humans imagined a substance or a process by which gravity could be blocked or control ed. Wel s cal ed it Cavorite. He linked the idea to propulsion as wel . He wasn’t alone, and prior to his writing, scientists like Nikolas Tesla, ﬀomas Townsend Brown, John Worrel Keely, and others al worked on ways to control gravity, to harness the power of antigravity.

If that demonstration wasn’t enough, Barry next went to a drawer and produced a golf bal . He wagged his eyebrows at me and stood several yards from the bench on which the devices sat. “Heads up,” he said. He tossed the golf bal underhanded into the antigravity eld being produced. ﬀe golf bal arced as it approached the eld and then, once it entered into it, shot violently upward into the ceiling.

“Holy shit,” I said. We were like two kids monkeying around while our parents were away. ﬀe bal had hit the acoustical tile in the suspended ceiling of the lab. Bits of the tile and a ne spray of dust fel and settled on the workstations and the oor.

“We better clean that up,” I said.

“Isn’t that so cool?” Barry said.

“It’s amazing,” I was stil having trouble wrapping my head around what I’d just read and then seen demonstrated. As before, my brain focused on something more concrete, more of the present. “Do you have a dustpan? A broom?” 劒is was real y my rst day on the job and the last thing I wanted was to get in trouble for breaking something or creating a mess in the lab. Funny how the mind works.

We spent the next couple of minutes with me sweeping up using a le folder as a broom and another as a dustpan. Barry took the half-sphere off the plate and removed the fuel disc.

It was showtime again. Barry reinstal ed the fuel disc. He retrieved a candle from his desk drawer. He held it in the mouth of the emitter and using a striker, he lit the candle. At rst it burned normal y, then, as he pul ed the emitter closer to the reactor and, presumably, focused the gravitational waves, the candle stopped ickering but the light remained.

“Bizarre,” was al I could manage to say in response.

Next he took off his watch, a classic chronometer with a second hand, and placed it in the emitter. 劒e second hand stopped.

“劒at doesn’t mean that the device has slowed time or created frame dragging,” I said. “It could just be electromagnetism affecting the watch’s works.”

Barry smiled and shrugged his shoulders exaggeratedly. “Maybe so. But check this out.”

He removed the watch and then rotated the emitter 90 degrees. “Look inside,” Barry told me.

I did, and there, about two feet from the bottom of the emitter, I saw that a

black dot had formed.

“It’s bending it. No doubt about it,” I said just barely above a whisper. I was stunned. Anyone with a basic understanding of physics understands that light can be re ected or refracted, truly bending light is another matter entirely. We can use lenses, mirrors, prisms, and other means to change the direction that light is travel ing—re ecting it or refracting it—but that doesn’t truly bend it.

ﬀat black dot, the absence of light in the visible spectrum, showed that the light was being bent.

ﬀe only force that can bend light is gravity. Having seen this latest of Barry’s demonstrations, what I’d been puzzling over seemed to have only one possible conclusion. ﬀe device we were working with was able to produce a gravitational eld. As far as I knew, as far as I’d say any terrestrial scientist knew, the only things that produced gravitational elds were enormously large objects—the Earth, for example. Here I was in a room with an emitter the size of a garbage can and a reactor that was smal er than a typical toaster oven, and the two of them worked in concert to produce a gravitational eld. I was in awe at this technology.

Of course, I was dealing with a propulsion system, if I was to believe what I’d been told to read, that didn’t originate on Earth. ﬀe only understanding I had of how the phenomenon of light and gravity operated was based on the work of scientists here on Earth. I had been standing there in that room with Barry for more than an hour, and in that time, I’d been processing what I was witnessing, analyzing based on my knowledge of, for lack of a better term, Earth physics.

ﬀat meant looking at this from both a Newtonian and Einsteinian perspective. Einstein’s description of gravity, which is fundamental to his theory of general relativity, tel s us that the effect of gravity is caused by distortions in space and time itself. Now, if you do something as fundamental

as distorting space and time, and reshape it, anything that lives inside space and time wil be affected. ﬀat includes waves, and so, waves can be bent and can fol ow different paths if you change the geometric properties of the space

they live in. Gravity can effectively bend space and time. Meaning that anything in its eld is also distorted and that includes light.

ꠇis thing was producing a control able form of intense gravity. Once it was produced, they'd be able to do anything they wanted to do with it. It could push the craft or pul it. It would also produce some bizarre side effects as it bent light. Much like the thermal heat waves that rise up off a heated surface like a roadway in summer, it would distort our eld of vision. A desert mirage is an even better example. You could see something that is not even there or the inverse of that—not see something that was there. Once you mess with the nature of light and optics al kinds of odd things could happen to our perceptions.

"It's the missing piece," Barry said. "If you can produce a gravitational eld like that, then anything's possible."

"Force elds. Antigravity. Exotic propulsion. You can bend space and distort time."

"ꠇe thing is so simple. No moving pieces. How the hel did they do this?"

Barry shook his head appreciatively.

"Elegant, real y. I just—. I real y don't know what to say. I just have so many questions. Do these devices focus the eld? Do they produce their own arti cial gravity eld? Are they amplifying it somehow? Can that eld be directed or control ed?"

"ꠇat's what we've been trying to gure out," he said.

"I mean, I get it that the reactor produces the eld somehow, but what's real y got my attention is the emitter. ꠇat's got to be one of the keys, doesn't it? If it were omnidirectional, I don't see how—"

"ꠇey're real y interested in how the reactor operates," Barry went on.

"ꠇat's to be our primary focus. I keep hearing that over and over. ꠇat

makes sense in a way. Start with the power source. Move in a linear fashion from there."

"But thinking linear may not work."

"I know," Barry said. "But as much as I hate to approach things this way, we've got to do what they ask."

"I don't want to jump too far ahead here, but as far as we humans know, the only thing that produces gravity is an immensely large body of mass." I pointed at the cylinder and then at the reactor. "I've seen you move both of those things. 劒at doesn't tel me we're dealing with a large amount of mass.

Something fundamental y different from anything we know and have experienced is going on here."

Barry took a seat again on his stool. We let a silence linger for a minute or two."So? What do you think?" Barry asked.

I remained standing in front of the two devices. "Wel , rst of al , this thing works here, on Earth. In this atmosphere. Under al the conditions of our existence. 劒at means that it operates for the most part in this physical realm and has to conform somehow to our understanding of our physics. Second, that makes no sense at al . Maybe it has to conform to some other physics. I mean, for it to produce a gravitational eld as we understand it, it would have to produce terawatts, or even more, of power. A tremendous amount of energy has to be produced. Al the power output possible on this planet focused into a smal area. Unimaginable power, real y. And the size of that reactor? Tiny."

I scratched the back of my neck and head. "How can I be standing here in front of this thing while it's stil functioning? If it's producing enough energy to create a gravitational eld, where's the waste energy going? 劒e basic laws of thermodynamics are being violated here. We should be burned to a crisp. No reaction is one hundred percent efficient. None. Not nuclear, not chemical.

None. It’s not giving off any heat. It makes no noise. It makes no sense!”

“I know,” Barry said. “ꠇese things have torn a huge hole in my understanding of science. A huge hole.”

“None of this is supposed to be possible.”

Barry pointed at the emitter and then at the reactor, “Yet there they are.

Can you tel me that they’re not there?”

“No. I can’t.” I paused for a few seconds. “Can you tel me how the hel this is possible?”

Barry laughed again and slapped the table. “What do you mean can I tel you? You tel me. ꠇat’s why you’re here isn’t it?”

At least that night made one thing clear. Yes, indeed, that was why I was there.

I imagined that if I were a screenwriter or a Hol ywood director, how I’d have been total y disappointed by what Barry had shown me. More speci cal y I’d be disappointed by how little, for lack of a better term, “spectacle” there was to the whole demonstration that he’d produced. ꠇe reactor and emitter weren’t that visual y impressive at al . I knew that they were producing a reaction that was extraordinarily powerful, but it didn’t look like much at al was happening. ꠇe room didn’t shake, eye-searing beams of light didn’t ash from it, it didn’t produce any kind of discernible sound. I thought of the jet engines that I used in my vehicles, the rockets we used to launch and those that NASA used to launch spacecraft beyond the Earth’s gravitational pul .

ꠇose things produced a kind of sound and fury, but what Barry and I witnessed produced nothing but a slight visual distortion.

If you’ve ever driven down a long stretch of highway and seen thermal heat waves rising from the heated pavement, then you’ve seen something similar to what I saw when an object was placed between the emitter and the reactor.

ꟻe visual distortion I witnessed was milder than that, but stil very much like it.

In the end, as much as I was always interested in powerful reactions, I was consumed by thoughts of how in the world, or in some other world, were these emitters and that reactor able to produce gravity? I now more clearly understood what our task was. ꟻis was my real “Aha!” moment. I was certain that the people in charge of this whole project had the same desire in mind that I did. We wanted to gure out how we could produce gravity in the same way this device did. ꟻat was the be al and end al of what we’d been assigned to do. In my mind, the whole alien origins of these objects, the whatever of their civilization, their purpose in coming to Earth, or whatever other far- ung questions about alien life forms and anything else, truly did take a distant backseat to the notion of how anyone could produce a force that was as fundamental y essential and powerful as gravity.

In a way, I was like a caveman who’d seen re for the rst time. I sensed that what I was seeing was so life altering in its possibilities that I had to do anything in my power to understand how I could produce that same phenomenon. As Barry later put it, what we were experiencing in witnessing what this device could do, was having a “science-gasm,” the world’s best.

ꟻe truth was, though, that what we were experiencing was a science-chasm. What that emitter and that reactor were able to do tore a gaping hole in our understanding of science. I was standing in a smal room where an

enormously powerful reaction was taking place, the freaking production of GRAVITY, and no residual heat was being given off. You can’t have one hundred percent efficient energy transfer. ꟻat’s just not possible. Nuclear reactions, chemical reactions, no kind of reaction in our world is one hundred percent efficient. And yet, this was one was. ꟻe entire output of power on our planet was essential y being focused in that room and I was stil standing within a few feet of it and being completely unharmed. ꟻe nuclear bombs we dropped on Hiroshima and Nagasaki were like tiny sparks compared to the power needed to produce gravity. A nuclear power plant that provides energy to a smal part of our planet has a veritable river of water, mil ions of

gal ons, owing through it to keep it cool. But there I was standing and talking with Barry in a room so quiet that I could hear the institutional style clock on the wal click over to the next minute. In the quieter moments when Barry and I were both lost in concentration, I could hear the hum of the uorescent lights above us.

I knew that I was repeating in my mind what I'd said to Barry minutes before, but it was like my mind was back to being an old-fashioned record and the needle was stuck in the groove. 劻e question of how this thing worked spun around and around and around again in my mind. Somewhere I suppose the question of how could this even be happening was faintly playing, but far too softly to matter.

CHAPTER

FOUR

AFTER THE FASCINATION CAME THE FEAR. I HAD NO idea how long I was supposed to work with Barry that rst night. I considered it a kind of orientation session. We weren't going to get into any of the speci cs of determining how the technology worked. 劻at seemed obvious to me, especial y since I was stil reeling from the effects of what I'd witnessed. We'd had that science-gasm as Barry had put it, and in the lul afterward we sat at the workbench, each of us lost in thought. It was an awkward situation to say the least. Barry and I knew nothing about one another, our educations, our previous work experience. We'd been thrown into a room together and he'd proceeded to demonstrate to me how the technology worked. After that, it seemed as if there wasn't much else to talk about in terms of the devices. We had the what, or so we both believed, but now we had to turn our attention to the how.

Final y, I said to Barry, "So, how long have you been working at this?"

His expression darkened and he let out a noisy breath through his nose, "I don't know if I can tel you that." He screwed up his face in disgust at what he'd just said. "What I mean is, of course, I'm capable of tel ing you that. I know the answer to the question. I'm not stupid or brainwashed. I just don't

know if I’m al owed to tel you that.”

We both looked around the room. We were alone, but given what we know both knew, the enormity of what those devices represented, the kind of security clearance required, it made sense that we were being surveil ed.

In fact, that was a part of the transition I was experiencing in going from being fascinated to being fearful. 劒at’s not completely accurate. I wasn’t in a kind of binary situation where I was either fascinated or afraid. I was both simultaneously, but just in different proportions. 劒at would prove to be the case the entire time I worked there. Part of that fear was a result of realizing my ambition. I always wanted to work with large and powerful forces. 劒at was

what I loved about jet cars and explosives and incendiary displays like reworks. I knew enough about them that I felt I could control them. What I’d seen on the workbench with the emitter and reactor wasn’t something that I felt I could control. I understood that it was “turned on” by placing the two objects in proximity to one another. (劒at kind of “powering up” wasn’t that unusual by the way; a Tesla coil and some radio transmitters have a similar functionality.) Beyond that, I had no understanding of how it produced a gravitational eld and control ed that eld.

劒at lack of understanding was absolutely frightening. What went unsaid, and what I didn’t real y think of until after that rst orientation session was over and I was on my way back to Las Vegas, were the larger implications of what this propulsion system represented. What if we were able to gure out how it operated? What if we were able to produce a similar kind of effect or the same effect? If we could help our government and military produce a gravitation eld, what kind of weapons systems would be possible? What kind of propulsion systems? What kind of energy production? How would we be able to change the world as we knew it? And, as clichéd as it sounds, what if that technology fel into the wrong hands? To what lengths would nations or individuals go to get what seemed to me to be, as the expression goes, the keys to the kingdom? If you could produce and control gravity, if you could distort space and time as we commonly know them and accept them, what

then?

I had to stop myself. I knew that those questions weren't going to get me any closer to doing what I had been hired to do. I'd learned while working at Los Alamos that the kind of institutional compartmentalization that went on there, and was also in place here, was the kind that I needed to put in place in my own mind. It's above my pay grade. I do my job as asked and leave the bigger questions for others. 劒at was going to be more difficult here, but I knew that I had to make my best effort or else who knew what might happen to me. Fascination and fear were going to have to learn to get along.

Of course, though, I couldn't shut down every thought I had. I did wonder brie y why it was that what seemed to me to be a relatively smal group of people were working on a project that had the kinds of implications that this one did. Los Alamos and the project to produce nuclear bombs involved an enormous number of people and resources. Stil , very few people outside of the program actual y knew what was being conducted out in the deserts of New Mexico. For al I knew, there were teams al over the country working on this

same project as Barry and I. At least I wanted to believe that. I wasn't so egotistical as to believe that I was one of only a select few working on something so monumental y important as this was.

"I feel like I should tel you this, though," Barry said haltingly. "I have no idea how long this project has been in progress. I do know that I was brought on, and I assume you were, out of necessity. Maybe this is very obvious, but we need to be careful." He nodded toward the bench where the two pieces sat there looking as benign as some kind of Scandinavian sculptures that some Hol ywood hipster might have had in his home.

He went on to explain that he'd been informed about an accident that had occurred that necessitated him being hired. He wasn't given any of the real details, but, as he put it, those involved were "unable to work again." By his tone and his expression, I knew that he meant that there had been a loss of life.

I stood there trying to imagine what it was those individuals might have done.

As Barry said, he wanted me to know because we were al under pressure to gure out the solution to this puzzle. 劒ere was also the temptation to take shortcuts, to take risks, and the consequences of a bad choice, being too eager to please or too frustrated to consider every possible effect when dealing with such an unknown could have enormous consequences. 劒at was a part of the fear. On the surface, without al those science ction-like displays of the propulsion system's power and capabilities, it appeared completely benign, a marvel of simplicity and elegant engineering of a type that was astoundingly sublime. Beneath that benign veneer was something more powerful than anything I had previously imagined. Yes, it was fascinating to consider. It had an al ure that drew me in, but just as magnets have poles that attract and repel, I sensed in those rst few hours in the lab that I was also going to feel respect for the intel igence behind its creation and a kind of nervous anxiety that I'd never experienced before in my personal or professional life. A whole lot was at stake here and to be incautious in any way seemed to be the least desirable approach to take, a last resort that I hoped that I would never even have to contemplate.

At some point, wel into the early hours of the morning, Dennis came in to let me know that I was done for the night. He escorted me out of the room and sat with me brie y in a smal office off the main corridor waiting area.

"劒is wil be your routine for the foreseeable future," he told me. "Once you have your nal clearance, you'l be housed on site."

"Barry?" I asked.

A ash of annoyance ickered across Dennis's face, but he answered, "Stil working."

A faint ringing sounded in my ears. It was as if I'd been concentrating so hard for so long that the tension in every nerve and tendon in my body was as taut as a piano wire and was stil vibrating long after the key had been depressed.

“You’l be partners,” Dennis said. “You discuss your work with him, solely here, and with no one else.”

“Understood.” I was about to say that I understood that the rst time that he’d mentioned that protocol to me but thought better of it. Above my pay grade to remind Dennis Mariani of anything.

We spent a few minutes going over my proposed schedule. Dennis wanted to be sure that I didn’t have any con icts with times and dates. Despite the tango of fear and fascination that I had, I assured him that I would clear my calendar to be certain that I’d be able to report as needed. He reminded me again that the security clearance could take some time.

“If you can think of anything that might get in the way of you being approved or even slowing the process, let me know now. It wil be far easier and can speed things up.”

“I can’t think of a thing,” I told him, and I spoke the truth as I did.

On the ight home, I thought again of the immense power the reactor and emitter produced and directed. I couldn’t imagine what those individuals involved in the accident might have done to wind up dead. I imagined that they had to understand that what they were working with had the power equivalent to what our sun possesses. 劒at is a mind bogglingly large amount of energy. I’d touched the emitter and the reactor, they were made of a material that could only have been cut into with something like a plasma torch. Who in their right mind, or with enough testosterone in them, would even consider applying that tool to something so powerful? Imagine someone taking the power of the sun and shrinking that reactor to the size of a smal box and putting it into a room with you and saying, “Isn’t that amazing?”

“Sure is.”

“Let’s cut it up to see what’s inside.”

“Okay! Sounds great.”

As a result, I knew that it was unlikely these guys had done something real y stupid. If they had, I'd feel bad for them, but essential y, they got what they deserved. Instead, they may have done something far less stupid, possibly something extremely intel igent or insightful and stil they'd lost their lives.

飀at scenario was far more frightening to me. I was going to engage in work with something unknown and I might even while being the most scrupulous and cautious as I could be, stil end up doing great harm to myself and possibly others. Even when I got home and lay in bed next to Tracy, I contemplated that thought, and as the sun rose the next morning, I began to wonder just how many more of those beginnings of a new day I might end up seeing.

From seemingly out of nowhere, a thought occurred to me. What if the guys we had to replace had completely misunderstood the nature of the objects. What if they couldn't get their minds wrapped around the idea that something so smal could be producing that kind of energy? Maybe they thought that it was retransmitting energy being produced elsewhere? 飀at had to be it. It made sense then that since there were no outward signs—heat, noise, etc.,—that it was producing power, it made sense to them to dig beneath that surface to see how it functioned. 飀e same with the emitter. It was essential y empty space, a kind of shel without any obvious other components, as we understood them, attached to its surface. 飀e housing seemed inert because it was only when the fuel, the triangular bit that Barry introduced to the tower, was in place that the system functioned. Maybe those guys weren't doing something stupid, but only in hindsight could we see the error of their way.

Before I could go on any further, I felt Tracy stirring beside me.

"Good morning," I said.

When she didn't respond, I repeated my greeting, slightly louder. Stil getting nothing in return, I slid out of bed and went to my desk. I had more pickups and deliveries to make, and despite only what seemed to be a few minutes of sleep, I knew that I had to get the day going. If I got the cal , I was going to have to be ready.

By noon, bleary-eyed and better able to identify the cause of the ringing in my ears as sleeplessness, I'd decided that even after just a couple of trips out to Groom Lake, this schedule was unsustainable. I thought it was going to be just a question of a short period of time before I was on staff ful time at the lab. I'd be living there, and I wouldn't be able to keep the photo business operation on

my own. Tracy was familiar with the routine and could handle the workload on days I was cal ed in or the mornings after. I'd have to show her how to use the machines. I knew she had the aptitude for it, since she'd shown some interest in the rocket car and other things mechanical. Besides, she was taking ying lessons, and the pre ight checks and other routines associated with that were more complex than a photo processer.

剱e one difficulty was that she was working at a local airport doing administrative duties for the airport manager. She liked the work and had a great relationship with everyone there. I hoped that we could leverage that last fact to our advantage. I wasn't asking her to take on the whole photo business.

She'd just have to l in on an as-needed basis. 剱e problem with that is we never got enough advance warning for her to ask ahead of time if she could be out for a few hours or a whole day. Maybe I was naïve, but it seemed to me that her job wasn't so essential that some accommodation couldn't be made.

And with that hope in mind, I returned home and we began the transition to a different way of life. Since I'd worked at Los Alamos before, and because Tracy's father had, I assumed that the secretive nature of the enterprise I was engaged in wasn't going to present any problems. Tracy knew that I couldn't talk about the exact nature of the work I was doing, and so I didn't real y broach that part of the subject with her. I did address the fact that my schedule would be, for a while at least, irregular at best. I told her that I didn't like it, but if I wanted to do the kind of meaningful work that made me happy and provided a better living for us, then that was the price to pay.

She agreed. As she put it, “I’m not jumping for joy about it, but I get it.

You have to do what you have to do.”

So, with that assurance in mind, I brought her up to speed as best I could on what her new role would be. Her employers proved to be exible, and so, on those occasions when I wasn’t able to be working in the photo processing lab or needed a few hours of extra sleep, Tracy would cover for me. As it turned out, things didn’t prove to run as smoothly as I’d hoped, and I was stil being run ragged most days, adding to what would eventual y be a heap of stress.

It was far easier for me to do that than it had been for Barry to do so for me, and I have to admit that I was frequently distracted while at home. I love problems and puzzles and the one that I encountered while working for EG&G was so engrossing that my mind would frequently take me back to the

lab. I loved Tracy and the life we had together, but I did nd myself hoping that every time the phone rang, it would the voice of the receptionist (as least that was the job that belonged to the pleasant but disembodied voice on the line belonged to) letting me know it was time to head to McCarran. I could never predict when the cal would come, but when it did, I bid Tracy a quick goodbye and a “gotta go.” A few times, dinner plans with friends had to be postponed, but Tracy and I were pretty much homebodies, so the disruption felt, to me at least, to be minimal.

My relationship with Barry was about as no-nonsense as a work relationship could be. I understood that I couldn’t act out like I had in my Los Alamos days, but Barry kept himself on an incredibly tight leash. 劒at rst night we worked together was real y the extent of him sharing any information that wasn’t directly related to the work we were planning on doing that night or in the hours ahead. I suppose that part of that might have been that I was stil considered, though no one referred to me this way, as a temp. 劒e larger factor in Barry’s tight-lipped approach was the presence of armed security personnel.

Whether some member of the security detail was in the room with us the entire time, or dropped in unannounced and exited unannounced, they

shadowed our existence within the con nes of the lab, the building the lab was housed in, and the entire facility. Whether the security team members had pistols or ri es varied at times, but it was clear that they meant business.

Whether they were there to protect us, or to keep us in line was never something I could decide rmly, but came to believe that it was likely both.

Whenever we left the lab, to go to the restroom or the cafeteria, we were always escorted not just to those rooms, but inside them.

ꠇe second night I worked there I received a reminder of just how tightly monitored I was going to be. As was true the rst time and, as it turned out, every time I was on the ground at Groome Lake, Dennis picked me up at the air eld. Unlike the rst time though, when we entered through a side door into the administration/laboratory section of the facility, we pul ed around to the front of the building. ꠇis time, the door to one of the hangars was open.

Dennis indicated that I should go inside through the large open door and into the bay. Inside sat a cylindrical craft, typical of the “ ying saucers” that I’d seen depicted in blurry photos and in TV shows and the movies. As I got nearer, I saw an American ag emblazoned on one its anks. ꠇe ag was printed in reverse, so that if you were looking in a mirror the image would be correct. I

thought that I understood better at that point. ꠇis was an experimental terrestrial aircraft. ꠇe story I’d been told in those reports was a kind of cover designed to keep me somewhat in the dark about the operational nature of the facility, etc.

As we walked past the craft, I did what I think anyone would do when walking past this type of vehicle. I ran my hand along the surface.

Immediately, one the guards walking along with us snapped at me, “Hands off!” His menacing voice was so loud, I was startled. ꠇe sound of it echoed in the space, and I wondered if it was my imagination or did I real y hear the sound of weapon being cocked?

In either case the message was clear: 劒ey had a very stringent set of protocols and I was being kept on a very tight leash. Not for the rst time would I have to rein in some of my impulses if I wanted to get along with an employer.

With the institutional gray wal s, the uorescent lights, the armed guards, and no hint of col egiality much less joviality, even after the rst week or so of working there, I very much began to feel like I was imprisoned in the con nes of the facility that I would eventual y hear being referred to as S4. I don't recal exactly the circumstances surrounding the discovery of that name. We didn't exist in complete monastic silence, though most conversations in the cafeteria were somewhat hushed and we were forced to eat at a table solely with our work partners. 劒e tables we sat at were spread at a distance so that al I could general y hear were murmurs. Regardless, S4 was where I was now spending a few days a week at irregular intervals and for irregular spans of hours.

劒ough Barry and I had somewhat different temperaments (for example I seldom wore protective clothing while working with dangerous chemicals and was more wil ing to take chances with my personal safety than he was) and approaches to problem solving (I tended to trust my gut while Barry was more methodical and programmatic, i.e., by the book), we agreed on one point: 劒e powers that be wanted to understand how this craft's propulsion system worked, so that meant we needed to concentrate our efforts on working with the reactor. As I saw in the rst demonstrations Barry made, the reactor was comprised of three parts: the housing, the "tower," and the fuel. Al three of those parts were relatively simple in design, seemingly manufactured from the same material based on appearance, yet they worked in concert to produce that astounding amount of power with one hundred percent efficiency. To put that

into context, the most highly re ned electric motors we have on Earth operate at about 85 percent efficiency. Some energy is lost through the production of heat. An internal combustion engine operates at about 35 percent efficiency; we lose some power again through the production of heat and gaseous exhaust.

Electric motors have fewer moving parts than your car's motor does, so it made sense, in one way, that the fewer the parts the better. In the case of the alien technology, the parts within the reactor didn't seem to move at al , thus making for a highly efficient means of producing power with no waste.

Imagine having a replace that burned hot enough to heat your entire home, but the chimney or stovepipe remained completely cool to the touch.

飆at's efficient. Al the energy being produced is used to serve our purposes. If you've ever driven your car past electric power lines and had the radio reception interfered with, you've experienced the inefficiency of our systems.

Some of the electricity being carried in those lines has "leaked" out and mixed itself up with the radio waves resulting in the production of static. We wondered whether or not there was any "leakage" in the propulsion system, so we measured al around the room to detect for stray energy waves and discovered none. Less scienti cal y, we had a radio playing in the lab, and its reception was as clear with the reactor and ampli er on as with it off.

Even back then, I realized that I was focusing, probably too much, on the concept of the system's efficiency. 飆at it had al owed the craft to travel mil ions of light years meant that it had to be efficient, that its propulsion and other systems—life support, guidance, or whatever—had to remain operational over a long period and vast distances. As far as I could tel , based on the brief glimpse I had of the craft itself, it had no external fuel tanks or other obvious means of carrying enormous quantities of some substance to power the craft. 飆at led me to think that maybe the entire craft itself was producing energy. Maybe what we thought of as the reactor was just a smal part of a larger system that produced the energy needed for ight and guidance. Or maybe, what we considered the housing, the outer shel that contained the tower and the fuel disc, was more than just housing and was integral y involved in the production of the gravity wave we witnessed?

One of the rst things we did was to consider how the device itself, its very structure, might contribute to the production of this enormous amount of energy. We decided to see if we could determine what kind of reaction was

being produced inside the device that held the fuel cel even when that copper-

colored triangle wasn’t present. Did the housing itself produce some kind of measurable effect—electromagnetic, chemical, radioactive? Did the reactor’s material composition contribute to the production of the gravitational eld?

Did it absorb some of the waste heat and, if so, did it then convert that energy captured into a different kind of energy that produced the eld?

To determine this, we used a measurement device, a kind of miniature Geiger counter to detect the presence of radioactive emissions, beta particles or gamma rays. Instead of utilizing a Geiger tube, this much smal er device used a smal chip transistor that was sensitive to radiation. We placed that on the tower in place of the smal fuel disc. Almost instantaneously, the readout indicated that the space inside the reactor, even without the fuel being present, was being bombarded by particles, producing a relatively intense eld of radiation within it.

“I’l be damned,” Barry muttered.

“瀀at’s something,” I added. “Have you never measured this before?”

Barry shook his head, “瀀ought about doing this for a while, but since we were told, wel , I was told there was no radioactivity, I assumed . . .” 瀀ere he sighed and then stopped speaking.

I didn’t take the bait and talk about the dangers of assumption. Instead, I took what I saw as the next logical step in my thinking. “So, those particles are being accelerated somehow. And it can’t be linear.” I held out my hands like a sherman indicating the size of the one that got away, my palms spanning nothing greater than the width of my shoulders. “Way too smal to get them up to any kind of speed over that straight-line distance.”

“瀀ey have to be moving around the reactor,” Barry said, agreeing with my assessment.

“It’s like a mini-cyclotron,” I offered. Ernest O. Lawrence, in 1932, created

the rst cyclotron, a type of particle accelerator in which charged particles accelerate outwards from the center along a spiral path. 劒e particles are held to a spiral trajectory by a static magnetic eld and accelerated by a rapidly varying (radio frequency) electric eld.

“Maybe we can detect those frequencies being produced by the electric eld?” Barry frowned and shrugged. “I don’t know if that would tel us anything.”

“It might.” I wasn’t sure what that might tel us, but I was excited about the possibility that we might be heading down the right path at least. I didn’t want

to lose the momentum from having at least determined that a nuclear reaction of some kind, one that maybe didn’t t into what our current understanding of particle physics might al ow for, was essential to how the space craft’s propulsion system functioned. Even if our understanding was rudimentary, at least we had taken a rst step forward. 劒at didn’t mean that a lot of other questions didn’t remain unanswered. I was used to the idea that answers, even tentative ones, led to more questions. If the reactor’s core, the structure that contained the site of the circling, spiraling particles, was central to how the whole system functioned and functioned so efficiently, it made sense to us to try to determine how it enabled this nuclear reaction to take place.

Barry and I spent the rst few weeks of our partnership stuck on the idea of how this incredibly simple system could do the job. It frustrated the hel out of us that the device seemed to so effortlessly overcome the kinds of issues that would have plagued any kind of propulsion system we used on Earth—

equipment placement and power loss over distance for example, and how it was that the signal being sent from the reactor to the emitter/ampli er travel ed only to those components and didn’t disperse more widely.

Our minds were boggled, and the only thing we could think to do that would be productive was to take a few steps back and ask a more fundamental question about the source of the energy, the fuel disc and the other parts as wel . What material(s) was/were these things made of?

Here’s where the idea of efficiency also played a role in guiding how I approached the problem of reverse engineering this system. 飏e system under which we operated, how Naval Intel igence (or whatever agency truly guided these efforts) insisted upon compartmentalization and secrecy got in the way of al of us doing our jobs easily and productively. Given that there was a metal urgy group functioning somewhere on the base where Barry and I had worked, you’d think it would be an easy matter to get a company directory, dial that line (these were pre-Internet days so no email) and request the answer to our question. Because al our efforts were so segregated and knowledge not shared, that was impossible for us to do. I can cite a half dozen or more examples of how this inefficient system worked against our efforts to be productive but that one should suffice. We were in a classic Catch-22 situation.

Get this job done quickly despite al the obstacles being placed in our way to move with anything approaching the kind of speed desired. If I hadn’t worked at a government facility before and wasn’t accustomed to this kind of

quicksand-like environment, I would have either panicked or grown so frustrated I might have taken some action that was self-sabotaging in the long run.Barry and I had to work within the con nes of what we were given, and we did. I couldn’t help but think that on some days, when we both sat there independent of one another silently pondering the problem that faced us, we were like shadetree mechanics staring at an inert engine, troubleshooting, hoping that somehow the device could speak to us to reveal what was ailing. In some ways, that comparison to amateur mechanics is apt. Given that this wasn’t a terrestrial y sourced propulsion system, we had limited knowledge about how it worked. When a car’s engine failed to start, you could rely on some basic fundamentals. It would be sil y to try to gure out what part or parts had failed that were causing the engine to not start. You could do that, of course, and start replacing parts until it nal y did start, if it did at al , but that would be expensive and time-consuming. Instead, the better approach would be to think of the car’s basic operating principles and the systems built to enable the three things needed for operation to function together—air, fuel, and spark. 飏ose three elements had to be working together in proper proportion and timing in order for the engine to start. Looking at the problem

of a nonstarting engine/propulsion system, you had a series of checks you could make to determine why the engine wasn't function. Was it getting air?

Was it receiving fuel? Was there a spark present to ignite the air/fuel mixture?

At one of our early sessions together, when Barry and I were in that hands-in-pockets staring-at-the-thing mode familiar to anyone who has had been stranded on the roadside, I looked at him and said, "I wonder if there are any shadetrees on Zeta Reticuli?"

Barry looked at me with a startled expression and then shook his head like a dog trying to shed water from its coat.

"What are you talking about?"

"Nothing, real y," I said, realizing that my al uding to amateur mechanics had eluded him. "Just that there has to be some kind of fundamentals to how this operates that we can focus in on."

"What does that have to do with trees?"

I went on to give him a quick version of the air, fuel, spark relationship of internal combustion engines.

It wasn't exactly an Archimedes-like Eureka moment and no apples fel from any trees here on Earth or on Zeta Reticuli, but we both thought about our stagnant situation for a minute.

"Seems to make sense then to focus on the basics. Go with what we know,"

Barry said after a few minutes.

"We don't know how the reaction takes place, but we do know that something has to be fueling it."

"So what? We're back to high school chemistry and talking about endothermic and exothermic reactions?" Barry sounded particularly glum.

“ꟻat’s not the point,” I said, straining to keep my frustration with his attitude at a minimum. “I know it seems like it’s too much starting over, but if we begin at the beginning, maybe we’l see some things in a new light.”

Barry smiled at my little pun regarding exothermic and the production of light. “ꟻe fuel’s the thing, I agree.”

“ꟻen let’s gure out just exactly what kind of fuel we’re dealing with.”

Barry walked over to the reactor. With it out of phase with the other part of the system it wasn’t functioning. He took the top off the reactor, removed the cap, and lifted out the tower. He held the triangular-shaped, copper-colored fuel “piece” in his hand and squinted at it.

“I stil can’t get over how smal it is,” I said, glad also that it had been determined early on that it emitted no dangerous radiation. It was clear that it was part of a nuclear reaction, but it wouldn’t be until years later that scientists here would be able to conceive and create devices that produced what would be cal ed “low energy nuclear reactions.” ꟻat meant that you could produce a nuclear reaction without nuclear and radioactive materials. We weren’t there yet in our understanding of the capability to produce these kinds of reactions then.

Barry had taken the fuel disc and set it on a smal piece of lter paper. With a very ne le, he scraped its surface, col ecting a minute amount of the lings on the paper. He added them to a liquid solvent and prepared to inject them into a gas chromatograph where it would be vaporized and analyzed. I joined him at the machine and watched as he inserted the material into the sample port using a microsyringe to get it through a rubber septum and into the vacuum chamber. Helium (nitrogen is also often used) began to ow as the carrier gas. I checked the pressure regulator to be sure it was within parameters.

It was and that gas joined the vaporized material we had injected in passing

through a glass column packed with silica coated with a liquid. Since the material we placed in the solvent was insoluble—in other words it didn’t

dissolve into the liquid but was suspended within it—the whole process took a matter of seconds. We were using a thermal conductivity device (TCD) and helium provided a shorter analysis time due to its higher ow rates and low molecular weight.

ꠇe detection system in the device converted the property changes of the substances heated and vaporized into electrical impulses that a computer could analyze. Basical y, it took an analog reading of the reactions taking place within the glass column and converted that reading to a digital one. ꠇe digital was less susceptible to interference and has a better signal-to-noise ratio. When we looked at the display the device provided, the chromatogram itself, literal y a graph of the results, we noticed that there were no spikes, which would have indicated the presence of various elements. ꠇe x (horizontal axis) re ected the amount of time while the y axis measured the abundance or absorbance of the chemicals present. For example if you put a drop of water in the device, you'd nd a spike indicating the presence of hydrogen and oxygen. What we saw was nothing at al except at the very far right of the graph indicating that something was in there, but it wasn't composed of any other known component elements. ꠇe obvious conclusion was that the material we were working with was an element itself—it wasn't a combination of other chemical substances but was one of the basic building blocks we cal elements.

Barry and I stood looking at one another, shocked to realize that the fuel wasn't a compound, that it wasn't composed of multiple elements but was a single element itself.

"I didn't expect that," Barry said. "I was pretty certain it had to be some kind of al oy."

I'd thought that same thing. After al , we have a limited number of elements on Earth and most everything else is composed of combinations or variations on those elements. Carbon is an element but when those molecules get rearranged in a certain way, you end up with a diamond that bears almost no resemblance whatsoever to carbon. We gured this fuel had to be like that

—something relatively common that was combined with other materials that, working together in some kind known process— ssion, oxidation, or whatever

—produced that enormous energy.

I also knew that terrestrial spacecraft used liquid oxygen and either liquid hydrogen or kerosene in their rockets as a propulsion system. Solid rocket fuel was made up of a combination of powdered aluminum and an oxidizer. Of course, we were dealing with an exotic fuel not of terrestrial origin, but the kinds of systems and processes we used on Earth were our only real frame of reference.

“We could try other kinds of spectography, but I’m pretty sure, given what this reveals and what we know of its origins, that it isn’t going to be made up of anything we typical y nd here—carbon, for example—or any of the metals.”

“飏at’s probably the case, but we can’t rule anything out,” Barry said, stating what I knew to be obvious. On the one hand as a scientist I wasn’t supposed to jump to any conclusions, but this was a special case. And, just because I made that statement hypothesizing the result, that didn’t mean that I was not going to do the work needed to con rm what I suspected. 飏e frustrating part of al of this chemical analysis was that we were both working outside our elds of expertise—physics. Eventual y we subjected the material to mass spectral interpretation using a process cal ed electron ionization mass spectrometry. It produced the same result—that same spike off the scale, more or less con rming what we suspected about the fuel being an element.

We also conducted something cal ed a neutron activation analysis.

Essential y we bombarded the fuel element sample with neutrons. As a result of that bombarding, we produced a radioactive isotope. Since we know the radioactive emissions and radioactive decay paths for each element currently on the periodic table, the spectra of the emissions wil reveal what elements make up the sample. In this case, there was only one element that made up the sample, but it wasn’t one that we could identify.

Every day that I was on site and Barry and I worked together, I could count on one thing. Dennis would show up and ask what we'd done that day, what progress we had made. We had to resist the temptation to oversel him on anything we'd done. We knew that they wanted us to get this job done and we felt the enormous pressure of those expectations. But as I've pointed out, we knew about the potential threat these materials posed. I also knew from my work in the scienti c community, and Edward Tel er's rise and fal within that circle was a clear example of this, if you hype something too strongly that is based on your speculation and highly reasoned and formulated opinions, you

run the risk of being too optimistic. You had to produce results, veri able and measurable results that could withstand intense scrutiny and analysis. We also knew that Dennis was a layman essential y. He didn't understand science to any great degree so until we had something that we could demonstrate to him as an unequivocal explanation of at least some part of the process that we could demonstrate, we had to be cautious about what we told him. It was a delicate balancing act trying to meet their expectations and ease their disappointment with our efforts. I was in a constant state of anxiety.

Worrying about my job safety, my personal safety, and the progress of my security clearance al became like a second job I had undertaken. 劒e problems we were faced with solving occupied me day and night. 劒ough I wasn't working every day at S4, and wasn't physical y on-site there, my mind was de nitely occupied by the work twenty-four hours a day and seven days a week. I was vaguely aware of Tracy and our life together. I wasn't checked out of the relationship completely, but I was preoccupied. She seemed to be in relatively good spirits. She was enjoying the ying lessons she was taking, the photo business had proven to be something she could handle with minimal stress, and even though it meant us being apart, I was looking forward to being hired ful time. I wanted to be engaged in meaningful work and Tracy and I were both adaptable, and we'd nd a way to accommodate the changes that loomed on the horizon for us. Life is al about change and adaptation, after al .

I trusted in both our abilities and as frustrating as it was to work in that environment, the fact that I was working on such an exciting project with so many potential implications for me personal y as wel as for the world, from time to time pierced the protective cloud I'd in ated around me so that I could concentrate on the task at hand. I didn't spend any real time thinking about how my name might one day be associated with an incredible advance in our understanding of the nature of the universe, but I did wonder what kind of bonus might await those of us working on the forefront of an exciting scienti c endeavor and what it might mean for our future.

CHAPTER

FIVE

IN FEBRUARY, IF THE END OF THE PREVIOUS YEAR'S rains are plentiful enough, the Nevada desert blooms with wild owers—various types of nightshades, geraniums and roses, miner's lettuce, and others put on a brief show. In 1989, when I made my way out to Groom Lake and area 51, I couldn't tel you whether or not a oral boom or bust was taking place out there. From my seat aboard the aircraft, or in the bus that took us to the S4 site, I had on gurative blinders—thinking only of the task at hand. My world was reduced to the colorless and sterile environment of the lab and its facilities. Funny that the word "facilities" is related to the word "facile"—which has as one its de nitions, "easily achieved, effortless." Another of its meanings is, "appearing neat and comprehensive only by ignoring the true complexities of an issue; super cial." 劒ere was little about the job that was easy and effortless and we seemed to be expected to ignore the complexities of the bigger picture question of how the craft operated. We were to focus solely on the one piece of the puzzle we were assigned to, and even the environment in which we worked re ected that single-mindedness of purpose.

I'd never worked someplace that was so devoid of signs of human life. I never saw a houseplant or owers. I never saw a photo of a loved one, a favorite vacation spot, a beloved pet on anyone's desk. No one had inspirational posters hanging on the wal s of their workspace, no cats dangling from a branch urging us to "Hang in 劒ere." Oddly, or maybe I

should say ironical y, there was a poster hanging in one of the rooms depicting a saucer-shaped UFO with the caption, “飜ey’re here.”

We were so segregated from others that even when we were in one another’s presence, we were not al owed to speak. If, for example, we needed to borrow the salt from another table, we had to ask one of the security team’s members to retrieve it for us. I would have thought that Barry and I would develop some kind of “us against them” mentality as fel ow prisoners serving time together,

but we didn’t. I knew nothing of his personal life and he knew nothing of mine. I don’t know if those who lived on-site during the week were more social, but given how oppressive the environment was where I worked, I highly doubted if there was a more lenient and relaxed and col egial atmosphere elsewhere in that part of the desert. In the world of animals and ora and fauna, some species manage to survive and even thrive in relative isolation, I didn’t count myself among them. I was not then nor am I now a highly social animal needing to experience the gregarious pleasures of others to be happy, but given al that was going on in that world, I was greatly uncomfortable most of the time I was in it.

My irregular work hours also meant that I was sleeping irregularly and that contributed to my sense that I was living in a kind of fog. I’ve always appreciated an intel ectual chal enge and have always been able to dig into a deep reserve of energy to power my brain. When I was on site, I was ne and functioning wel mental y. At home, that wasn’t exactly the case. I was managing, but preoccupied, so when Tracy expressed some concern she had about seeing men parked in a car just a few hundred feet down the block from our house, I was a little confused at rst.

“I don’t know,” I told her initial y. “People do al kinds of things.”

“飜ey don’t look like they belong here,” she said.

“What does that mean?” My tone betrayed an annoyance greater than what I felt. I immediately picked up on it and apologized and rephrased the question, “What have you noticed that leads you to believe that?”

“飏is is Las Vegas, you don’t wear a dress shirt and have your suit coat hanging in the rear window. And its two guys, always two guys. 飏ey just sit there and they don’t even seem to talk to one another or even look around. It’s like they’re at a drive-in movie or something.” Tracy shrugged her shoulders.

“I’m not paranoid, but something is up with those two.”

It nal y dawned on me, “飏ey’re most likely watching us. For the security clearance.”

“Oh,” Tracy said atly. At the time, I didn’t remark on how muted her response was, how a half-dozen states of mind or emotion could have circled around that tiny mass of sounds.

“It’s al part of it,” I added, needlessly as it turned out, since Tracy had already left the room. I went into the kitchen and let the water run for a long time before l ing a glass. When I put it to my lips, I realized that I had turned

the handle to the right and not to the left. I drank the too warm water anyway, as if punishing myself for some indiscretion I wasn’t even aware that I had committed.

One night when I was on cal , Dennis came into the lab. Barry and I had been working on an experiment to test how the location of the parts of the propulsion device affected its operation. We moved the emitter a few degrees from center, closer or farther to it. 飏is, along with seeing how focused we get the gravity eld to be, had been taking up much of our time.

“Gentleman,” Dennis said. “I’d like to speak to you both.”

Barry and I eyed one another warily.

“It’s about the fuel.”

We each sat on a stool and Dennis produced from his pocket one of the fuel

pieces. It seemed to be an exact duplicate of the one we had been using.

Dennis went on to explain that manufacturing an additional fuel element was necessary. He wanted our assistance with the process. I knew better than to ask, but I was immediately wondering, Why the two of us? Yes, the fuel element was an important component of the propulsion system, but we didn't have a clear sense of how it was made or what it was made of. Dennis mentioned that the metal urgy group had made some advances and there was some certainty—I was used to Dennis and his vague references and passive voice constructions that never clearly identi ed who did what or who directed or requested what—of its component materials.

He didn't tel us exactly what those components were, only that the fuel pieces needed to be machined.

"飏at's the kind of stuff that the guys at Los Alamos do a lot of the time," I said as much to myself as to Dennis.

"飏ey do?"

"I knew a number of guys in the machine shop—wel , one of the machine shops—and they were helpful. I know that from conversations I had with them that they were working on a lot of cutting-edge materials. High-precision materials, incredibly smal tolerances. Weapons systems, I assumed. Highly classi ed work."

Dennis nodded. He produced another of the fuel triangles. He set it on top of the rst one. Each was about the size of a half dol ar and no more than a quarter-inch thick. I'd handled one before, obviously, but seeing the two of them stacked like that made me understand something I hadn't before. Truth

be told, I didn't give that much thought to how they were made. But at that moment I got a better sense of how they were likely to have been machined.

飏ey weren't stamped or cut out of a single at sheet of their material. Instead, it seemed to me, that a larger block of it would have to been shaped into a cone. From that cone, whatever cutting tool was needed could be guided to

cut through that cone at various angles to produce the triangular-shaped pieces.

For a few minutes, Dennis, Barry, and I discussed how we thought the objective might be met. I offered my cone-cutting theory and Barry asserted that he was in complete agreement that my suggestion was the likeliest scenario.

“Los Alamos can do this,” Dennis said while nodding.

He pushed himself away from the lab’s countertop and walked out of the room. He came back in a few minutes with what appeared to be a cylindrical ingot of the material. I had no idea where he got it from—whether it was a part of one of the crafts or came from somewhere else—but he hefted it in his hand, according it no more regard than a deli counter clerk handling a bologna sausage.

“飏is wil go on ahead of you,” he said, nodding in my direction. “We’l get the schematics drawn up and then you’l be off to Los Alamos. As far as they’re concerned, this material is known as LA1000. As far as they’re concerned, and as you’re concerned while with them, this is a new al oy used for armoring.”

“Understood,” I said, wondering how soon I would be going and if this little eld trip was a good sign or a bad sign for my stil pending clearance.

Could the whole thing be a set up to test me? Ultimately, I decided it didn’t matter. I was told to go to Los Alamos, and that’s what I was going to do. 飏e next time I got the cal from EG&G, I was told to report to McCarran but that I’d be taking a commercial ight out of Las Vegas to Albuquerque. From there, I’d transfer to a different regional ight to the Los Alamos airport. I was only going to spend a few hours on site, delivering the instructions for the manufacture of the fuel disc/armor. 飏e ingot was sent via courier to Los Alamos while Dennis met me at the airport and gave me a sealed 9 by 12-inch envelope that I assumed contained what I needed to deliver to the machinists at the New Mexico laboratory. Based on my experience working at LANL, I gured the ingot got sent out on what we referred to as a “dash

ight.” 劒ey took off daily from Mercury, Nevada, near the old AEC base camp at the

nuclear test ight. Back in my days in New Mexico we often received materials from Area 51.

Landing at the airport in the city where I’d spent so much time felt both familiar and surreal simultaneously. I wasn’t able to tel Tracy where I was going, only that I’d be gone for longer than I usual y was. I had no idea how many hours that would be, but I told her not to worry.

“I don’t worry,” she had told me. “I just don’t understand and I don’t like that.”

I had no way to reply, and just as I had landed in Los Alamos with no sense of how I was going to get to the location on the site’s thousands and thousands of acres, I had no way to reassure or make Tracy understand that if I could tel her what I was doing I would. Trouble was, more often than not, I real y didn’t understand what I was doing. In my mind, that meant I wasn’t withholding anything from her; I was the one from whom things were being withheld. I was being the good soldier, and had to trust that Dennis and those in charge had my best interests at heart. I knew that was never real y going to be case. I was simply a moving part in a large and complicated machine, easily replaceable in some ways, of high value in others.

劒e answer to my wondering about how I was to proceed was answered by someone asking me a question. “Are you Bob?”

I turned to face a young blonde man in his mid-twenties. A wedge of hair angled across his forehead and over one bespectacled eye, like a curtain across a picture window.

I nodded and the young man said, cheerily, “Let’s go.”

A few minutes later we were in a white passenger van passing through a security checkpoint on the property of the LANL. I had never worked in that area before, and even the entrance was unfamiliar to me. My driver hadn’t

engaged me in any kind of conversation, and I wasn’t feeling particularly chatty myself. I was very tired and may even have dozed off for a second or two on the drive over, just as I had, though for much longer, while on the ight in.

꠸e van stopped in front of an administrative building, what looked like a typical office building. ꠸ere, I gave my name to a man behind a reception desk and picked up my visitor badge. He made a quick cal and then a woman came into the waiting area, and without introducing herself, asked me for the envelope I’d been carrying. She left immediately and I stood there wondering what I was supposed to do next. After a few moments of me standing there,

the woman returned, without the folder, and said that I was to fol ow her. I went into an office and was introduced to the man who supervised this particular machine shop.

We went over the specs and how we wanted the cylinder to be sliced into discs, then stack those discs, fuse them, then machine that into a cone and then into the triangle-shaped bits we’d been using to help power the reactor.

None of what I asked registered on the face of the man I was speaking with.

He spent most of his time looking at the speci cations sheet and the schematic. In some ways, I envied him. He looked at the task as a kind of simple mechanical engineering fabrication problem. I knew that people like him worked with plutonium as part of the nuclear weapons making, so, given that none of what I was describing to him involved ssile materials—at least far as I knew—this was (pardon the pun) a relatively “run of the mil ”

operation for him and his people.

“Of course, we also need al of the material back,” I said. ꠸ere’d be a minute amount of residue or leavings produced in fabricating the fuel triangles, but we stil needed even the tiniest fragment to be returned to us.

“Any idea what kind of phase changes or thermal expansion we might be dealing with?” he asked, ignoring my statement entirely.

“I don’t believe there wil an issue, but with the kind of tolerances we’re talking about . . .” I shrugged but didn’t go on. I was tempted to try to ingratiate myself to him and his people by letting him know that I understood about the work they did, how creating an al oy with plutonium and gal ium and other things was part of what they were responsible for, materials that presumably were far more volatile than what had been shipped to them.

Instead, I let him, the expert, work out for himself how they’d get the job done. I wasn’t worried about that at al , and shortly before I left the office, the supervisor sat staring off into the upper corner of the room for a few seconds and then a satis ed smile spread across his face, “I think I’ve got a better idea of how to get this done.”

He reached into a drawer and pul ed out a smal notebook and began scratching out a few notes. I didn’t want to disturb him, so I simply said, “I’l let myself out.”

Receiving no response, I walked out of the office and back into the waiting room. In what seemed like no time, I was driving back home from McCarran.

I arrived home in the late evening, just around dinnertime, and noticed that

the car that Tracy had talked about wasn’t there. Tracy wasn’t home either. She left no note, so I put a frozen meal in the microwave and sat there eating the overly crisp outside of a macaroni and cheese dish and its stil only partly thawed innards. Fatigue overtook me while I sat in an easy chair, and before I knew it, sunlight on my face had awakened me. Stiff and sore from my cramped sleep, I stood in the hot shower hoping to ease the tension from my muscles. As soon as I had toweled myself off the phone rang and less than twenty minutes later, I was out the door and heading back to McCarran and on my way to S4, a cup of coffee and a fast-food egg sandwich of some kind jousting in my bel y as I fol owed Dennis into an unmarked office.

“Take a seat,” Dennis said.

Tired, and tired of Dennis’s no-nonsense approach to things, I sat down in the chair and made no effort to engage him in any conversation at al .

“A new directive has been issued,” Dennis rummaged through a desk drawer and withdrew some papers.

I thought that he’d tel me about the new emphasis we were to take in our research. Instead, he pul ed out a smal caliber revolver, what looked to be a .22

cal Smith & Wesson, and placed it on the desk.

“You’re to carry this at al times when you you’re off-site.”

Whether it was exhaustion and discomfort or I’d bought into too much of the Iron Curtain propaganda that had permeated life in the US for a while, I immediately thought of the four Russian scientists who had once been seen regularly around the facility. 劒ey hadn’t been seen for a few weeks, and even Barry, loathe as he was to engage in anything even approximating office gossip, had commented on their absence. I also speculated about what had transpired and was now putting two and two together and coming up with .22.

I didn’t respond to Dennis at rst but smiled rueful y to myself thinking that 2 + 2 = .44—the caliber of the long-barrel Magnum I owned. I wasn’t exactly a gun a cionado, but given how much I liked explosives, I enjoyed owning a weapon and appreciated what one could do for me. I also owned an Uzi submachine gun that I appreciated for its design. I didn’t let Dennis know about the Uzi, but I told him that I didn’t need, or want, the .22 he was about to issue to me. I admired both the weapons I owned but also understood that, on a certain level—practicality—they were ridiculous to own. I had purchased a holster so that I could carry the .44 on my person, and that meant that I

would have to wear a long coat to cover it—not ideal in the heat of Las Vegas and only a little more so when I lived in New Mexico.

At the mention of the Smith & Wesson Magnum, Dennis slipped a bit for the rst time in the two months I’d known him. One eyebrow raised a fraction of an inch but then quickly settled.

“Have I made your day?” I asked him, referencing Clint Eastwood’s .44

Magnum-carrying character Harry Caine and the famous line from the lm Dirty Harry.

“Funny,” Dennis said, showing no sign at al that he saw the humor in my remark. “At least I won’t have to l out these forms. 劒at makes my day.”

I’d expected him to put up more of a ght with me on this point, but was glad that he hadn’t. I was familiar with my .44 and more comfortable with it. I wasn’t comfortable with the idea that I needed to be comfortable with the weapon. I pushed as many of those thoughts outside my mind as I could.

“We’re done,” Dennis said.

I went back to the lab. Barry looked up at me but didn’t ask a thing about my meeting with Dennis.

“劒ere real y is nothing unusual going on here,” he said. He handed me a readout from the gas chromatograph. We’d decided to do an analysis of the copper-looking plates on the sides of the emitter. In appearance, they seemed to be the same material as the fuel triangles, but proved to be, based on this analysis, made of common elements.

“Not exotic at al ,” I said, handing the sheet back to Barry. “Not the most typical of al oys, but—” I let the sentence trail off.

Barry nodded distractedly.

“Have you given any thought to what I suggested about building that measurement device? With the right instrument we’d be able to produce more veri able results.”

“It makes sense. Time is the one concern I have.”

“I agree, but with the kind of seat-of-the-pants tests we’ve been doing we don’t have any way to quantify the effect of the reactor.” I said thinking of

the various demonstrations we'd been doing in the last few sessions. 飙ey were variations on the golf bal demonstration that Barry had done for me. We could see the results of the gravity wave, but we hadn't done a very good job of measuring the effect on an object placed in its path.

"I've got a pretty good idea of how to fabricate an instrument that wil work. My rst job out of col ege was with an electronics rm. I used to repair and refurbish pressure regulators. If they can measure minute pressure differentials, they should be able to measure the effects of the gravity wave.

飙ey'd also give us a sense of how the wave disperses."

"We'd have to build something fairly large to do that. What diameter would you estimate?"

"Sixty inches?"

"We'l have to get quite a few of those sensors and then we can get started.

I'l talk to Dennis."

On the ight back to Las Vegas, I was thinking more about the conversation I had with Dennis than the one that Barry was going to have with him. I speculated about the presence of the men outside our house. I'd been fairly wel convinced that they were part of the security rm who was investigating me so that I could receive the top-level clearance I needed. After hearing Dennis imply that I needed to be more concerned about my personal safety, I wondered if those guys had been assigned because of some imminent threat to Tracy or me. Worst-case scenario, what if those men hadn't been working for our side and instead were working against us. It seemed unlikely, but the whole "What happened to the Russians and why had we been cooperating with our sworn enemy" scenario was generating its own bit of paranoia. I wondered if there was some device that I could make to measure the in uence of paranoia on me. Even without that device, I began to carry my

.44 Magnum and the Uzi in my car.

We got the approval to build the device, and over the course of the next few weeks, I worked at wiring the sensors in sequence. We had to use dozens and dozens of them. 劒e work was tedious but at least I could leave after each work session and see some progress. We also got some great news during that period of building the measurement instrument. 劒e fuel triangles came back from LANL and they worked just as the ones that we'd rst been supplied with.

Everyone was very pleased, and even Dennis showed some enthusiasm with a

"Good work," compliment. I hoped my involvement in the Los Alamos venture might offset a slight blunder that could have spoiled any chance I had of getting the job ful time.

Before I began to carry my weapons with me, I decided that I'd better register them. 劒e registration process was going to be easy, but I tripped up

when I told a friend of mine that I could only spend a few minutes with him having lunch because I had an errand to do.

"What's that?" Gene asked, a perfectly normal conversational tactic.

"I have to register my guns," I told him, and then added, regretting the slip of the tongue as soon as it was out of my mouth, "I need to use them for work.

By this point in 1989, I had known Gene Huff for almost ve years. He worked as a real estate appraiser and taking photos was part and parcel of his job. We'd met because of my photo processing company, and, since Gene worked very regularly and needed frequent photo service, we spoke on a number of occasions and eventual y became friends. Actual y, Gene dealt with Tracy original y when she was doing some of the drop-offs for me while I ran the equipment. She'd stop by his offices, chat a bit, and they talked a few times about living in Los Alamos. Gene assumed that I worked in photo processing there, and it was only later when we became friends and we'd talked about a wide variety of things that he nal y said to me, "You know, you speak so knowledgably about so many things, you've got your rocket

car, and everything else, you sound like a scientist and not just Bob 觙e Photo Guy."

"Wel , I am a scientist. I've studied and have degrees in electronics and physics."

"Why didn't you say anything?"

"What? Was I supposed to hand you your photos and say, 'By the way, I'm a scientist'?"

"Yeah. 觙at's what I would have done."

"Wel , I'm not like that," I told him.

Eventual y, Gene and I grew closer and we'd talk about a lot of things, but what my new work was, and why I might need a gun, was not on the list of topics to be discussed. To his credit, Gene saw how I had blanched when I made the mistake of mentioning the gun and work, and he didn't press me for details. Stil , that I had let my guard down that way bothered me a lot. I trusted Gene; after al , he trusted me enough to sit at my kitchen table with me while I mixed up a batch of nitroglycerin and went off into the desert with me to witness its explosive force. Gene shared an interest in explosives and pyrotechnics, and two years earlier, in 1987, we had initiated a gathering in the desert of fel ow enthusiasts for what eventual y became known as "Desert Blast." 觙rough that and other shared interests, I also met John, the second son of the founder of the aircraft manufacturing rm, Bil Lear, he of the Lear Jet

fame. John was an accomplished pilot himself, and later gained some notoriety due to his claims about extraterrestrial life. John and Gene were both very interesting men with active and inquiring minds and the kind of curiosity that I possessed as wel .

I met John through Gene. Gene had watched a local TV show that George Knapp, a journalist at the local ABC television affiliate was doing cal ed On the Record. John Lear was George's guest. He was an active believer in what

was termed ufology. He believed in the existence of alien life, that extraterrestrial craft had come from other planets and solar systems. He appeared at panels on the subject, and he mentioned to me on several occasions that he believed that alien craft were being own in the desert outside Las Vegas. Gene had some interest in the subject, as did a lot of people in the Las Vegas area, due to the frequent sightings and the “light show” out in the desert. He wasn’t a proselytizer like John was, just, as I mentioned above, a real y curious guy.

John’s views intrigued him, and he thought he’d cal John up to talk more about the subject. ﬀat’s just the kind of guy Gene was. When reached, John was a bit guarded at rst, wel at lot guarded probably characterizes it better.

For whatever reason, Gene mentioned a couple of times that he worked as a real estate appraiser. ﬀe Lear family was wealthy and held several properties in the area. John lived in what I would eventual y come to think of as a kind of compound—an enormous house and grounds. John seemed more interested in talking about having Gene come out to do an appraisal than he was in talking about UFOs. Gene thought it might be interesting to see the place where the pseudo-legendary, at this time, John Lear lived.

ﬀey made arrangements—in lieu of payment, John would share some copies of UFO videos and other material related to the subject. Gene cal ed to ask me if I was interested in going. He said that I could pose as his assistant.

Of course, I’d heard of John and his exploits as a pilot, so I agreed to go. He sounded like an interesting guy, and I was curious to see how the other half, the wealthier half, of Las Vegas lived. As part of the appraisal process Gene would have to take quite a few photos, so I became his “second shooter” and gear-toter. After a brief introduction, Gene and I went about our business.

Gene always claimed that because I was just the assistant, John ignored me.

Gene dropped names a few times, mentioning that I had once worked at LANL. ﬀe Los Alamos reference didn’t sink in until that third mention.

When John realized, belatedly, that I wasn’t just a photo guy but had worked

as a scientist, we started to talk about his experiences and mine.

The two of us hit it off. We had some similar interests in aviation, propulsion, pyrotechnics and other wide-ranging topics that caught our imaginations and intel ects. This made us, if not kindred spirits, then at least individuals who could carry on a stimulating conversation with one another. I also knew this about John: He had some interesting connections in the government and the military. He'd done some work with the Central Intel igence Agency, and he could tel a great story. I never once, for a second, believed what he told me and others about alien spacecraft. I tolerated that part of him, mostly because the rest of his life and accomplishments were on the record and, at heart, he was a kind and fascinating guy.

I also eventual y came to understand this about John: He had no bul shit detector. He'd never seen any of these objects himself, and several times expressed to me his disappointment that he hadn't, and, in my estimation, he indiscriminately took in what other people had to say on this subject. In that sense, he was what I would cal a "true believer." As I looked at it, if someone said it; John thought it must be so. He gave the same credibility to something that someone at the CIA had told him as someone he met in the street for the rst time. That's not to say that John was gul ible or not a highly intel igent guy. He was an expert in the eld of aviation, and his ability to recal information and to even reproduce on paper a diagram of the hydraulics that powered the landing gear of an L1011 aircraft—which I once asked him to do

—was nothing short of remarkable. I took his belief in UFOs and aliens with a grain of salt. A lot of other people shared his belief, but that didn't make them bad people or uninteresting company.

I also knew that Gene was eager to learn as much as he could about what I was doing out at Area 51, but he didn't press me for details. The afternoon of my little slip up with him, Dennis showed up at my house and told me that I needed to go with him and that I had to bring my weapons with me.

We wound up at a Las Vegas Police Department substation at the corner of St. Louis and Atlantic.

After we got inside the building and past the desk clerk, and after Dennis had shown the man there his identi cation card, he instructed me to sit down in the waiting area. I didn't have to wait there for very long. Dennis and a uniformed officer came out a few minutes later. 劒e officer pointed at me and

shook his head, "劒is is the guy? Why would anybody let alone the Russians want to do anything to him?" I tried not to take the remark personal y, but I knew I looked like what I was—a bespectacled scientist and not a James Bond-esque spy or whatever else this cop had imagined. I also didn't like that he'd brought up the subject of the Russians again. Dennis didn't look very pleased that the guy had said something in public about the nature of our visit and the need for me to have those guns registered.

劒at week I wasn't cal ed in to work at al , and that troubled me a little. To offset that worry about how my security clearance was proceeding, two men from the Office of Federal Investigation showed up at the house. Tracy and I had a couple of people over, her sister Kristen and another couple we had become friendly with, Wayne and Robin. Wayne was a mechanic and serviced our vehicles. We became friendly due to my interest in vehicles general y and he was intrigued by the jet car that I used to take al around doing demonstrations.

At this point, Tracy had indicated that she was no longer interested in running the photo developing business. Wayne and his wife were looking for another business opportunity. 劒ey were over for the day discussing the possibility of acquiring our photo operation. Before nalizing any arrangements, I thought it best to get them acquainted with the machines and how they worked. Wayne was, obviously, mechanical y inclined and used to working with various processes and systems, but this was unfamiliar territory for them both. 劒ey also weren't familiar with notion that some representatives of a federal agency could come to the house unannounced and begin looking around. On the one hand I was glad to know that I was stil being considered, but the intrusiveness of it al didn't sit wel with me. I was in a bind. If I reacted too strongly, then I'd amplify Tracy's irritation. One of the agents was named Mike 劒igpen, and though he tried to be courteous and professional, something about him rubbed me the wrong way. Maybe it was because

Wayne and wife Robin were there. Because they were, I had to reveal for the second time that I was doing work which required such high-level clearance. Prior to that, neither Wayne nor his wife were aware of what I was doing, presuming that I was operating the photo business.

Tracy knew about the need for security clearance, so I told her about the search. She wasn't pleased about the idea of the two men going through drawers, closets, cabinets, and nearly turning the place inside out. Unlike in

TV shows or lms where they leave the place a mess, these guys were very respectful.

Despite my assurances, Tracy was stil shaken by the lengths the men went to. I told her that we'd done the right thing by al owing that search, though I was not real y happy about it al . I kept from her my relief that their presence let me know that the investigation was ongoing. 劒ere had to be some reason why I wasn't cal ed out to work at S4, but my being denied a security clearance wasn't the reason—at least not yet. Knowing that I was stil in the running was far better than one of the other alternatives. I didn't want to press that point too much. Nor voice to Tracy my concerns that this was an odd way to go about this business. 劒e less said the better. Let Tracy believe that this was standard operating procedure, and work to convince myself that this was true, and proceed with focusing on the job at hand.

I can't say for certain why it was that a brief period of inactivity went on, but there were a couple of occasions when the reactor and the emitter weren't present in the lab. Other units working on other systems must have needed to use them. Of course, we were never informed of this and it was mostly a surmise on my part and on Barry's part, but given what we eventual y were al owed to do and to witness, that made the most sense.

I DON'T KNOW IF IT WAS BECAUSE I WAS RELIEVED TO LEARN that I was stil being actively investigated for the security clearance I needed or if the home search indicated that I was under a new level of scrutiny, but I began to feel more comfortable talking with Dennis about our lack of real

progress. Not only that, but Barry and I both began to let him know how much a hindrance it was for us to not be al owed to see and to inspect the other systems of the craft. We could study the reactor and the emitters in isolation, and we were getting closer to having a working instrument to measure the gravitational effects produced, but how that propulsion system functioned within the larger context of the craft was a gaping hole in our understanding.

“飀is isn’t like a car engine of some unique design that’s been dropped into a conventional automobile. We don’t have a baseline knowledge of the drive train and the transmission and the steering and the suspension that are al common to most cars,” I explained to Dennis in defending ourselves against

his accusation that we weren’t trying hard enough. “How this entire craft functions, how this reactor and emitter work in synch with the rest of the components and systems is something we have no idea of. We’re working with an unknowing inside of a larger unknown. 飀at’s not a great situation to be in, especial y if others have knowns that they can share with us.”

My analogy seemed to work.

“Makes sense,” Dennis said. “I’l see what I can do.”

Barry and I took every opportunity after that to work at that tiny ssure in Dennis’s armor. Every chance we got, we mentioned something about how seeing the entire craft was going to help speed the process.

“No one ever said that this was going to be easy,” Dennis said to me one day.“We’re not asking you to make it easy,” I told him, “We’re asking you to let them know that they don’t have to make it so difficult.”

CHAPTER

SIX

WE’VE ALL HEARD THE EXPRESSION, “BE CAREFUL what you wish for.” I can’t say for certain that thought passed through my mind during the

extraordinary days and nights I spent on the grounds of the instal ation at Groom Lake. As is true of most experiences, when you are in the middle of one, deeply engrossed in the moment, you don't have a lot of time to consider anything but what is transpiring right then and right there. We've also al likely heard the importance of staying in the moment, staying present, and other variations on this idea.

After having completed the last of the work on the pressure sensors, I arrived at Groom Lake a few days after speaking openly with Dennis. I went to the lab building as usual. What wasn't usual was that Dennis was there to greet me. At rst, I didn't think much about him saying to me, "You're not going to be working inside today." Instead of going inside, we walked to the hangar facility. Barry joined us.

I could see immediately that one of the hangar doors was open. With the light coming from it, the scene resembled a jagged jack o' lantern's mouth. I understood immediately that what Barry and I had been asking for was about to happen—this was the night we were going to see the actual craft, or crafts, themselves. My initial reaction was to feel enormously relieved. If they were al owing me this opportunity, then that boded wel for my future with the team. I also felt vindicated—Barry and I had succeeded in convincing the powers that be that the best approach was a more open approach. Just how open that approach was going to be was stil to be determined, but at least they'd acknowledged the importance of our input. In a work environment like the one we were subjected to, even the faintest of nods towards your needs seems like a monumental gesture. I was also thril ed by the opportunity to see such amazing technology up close. Even if what we'd said—that seeing the craft and the reactor, ampli er, and emitters in the craft could help speed the

reverse engineering process—didn't prove true, the privilege of seeing something that presumably only a handful of humans had seen was going to be something I'd never forget.

Along with al those thoughts came another: How much access to the craft were we real y going to get? 劒e answer to that question came rather quickly.

Once the vehicle came to a stop and we dismounted, Dennis said, “Take a good look. I can’t guarantee you’l get another opportunity like this one.”

I walked into the wedge of light coming out of the hangar and onto the concrete apron. I wanted to get the long view of the craft. 劒e familiar saucer shape of the craft, like an inverted soup bowl resting atop a second one, sat on the paved oor of the hangar. It had no landing gear or other structure that might have supported its weight while on the ground. From what I could discern, it was approximately fty feet or so in diameter and was roughly twenty feet tal . Where the two soup bowl discs met, the skin of the craft had a kind of rounded rim before the curves rose and fel to the narrower top and bottom. I moved closer and did a quick 360-degree turn around its perimeter, and where the two “halves” of the craft met, I could detect no seam. 劒e same was true of the entire exterior of the vessel. I saw no panel lines, no welds, no rivets or other fasteners. As I had on rst seeing the craft on that rst day at S4, I ran my hand along the surface. I looked over my shoulder half-expecting to be reprimanded for touching it as I had been previously, but none of the security team members said anything to me. As before, the skin of the craft felt like a metal—cool to the touch and very, very smooth. It was dark aluminum in color, monochromatic across its entire surface except for the four black rectangles near to the top of the upper dome-like portion. (Later on I would speculate that they were sensor arrays of some kind, planar sensors that assisted in some type of celestial navigation. But at this stage I merely noted them and moved on.)

I was so engrossed in observing and noting as much as I could that I had nearly forgotten that Barry was also in the hangar with me. I entered the craft’s interior through a smal access hatch, just wide enough for me to put my shoulders through it with a fraction of an inch to spare. Once inside, I couldn’t stand up straight. Work lights had been instal ed at various points inside the craft. I maneuvered on al fours, hunched and using my hands to steady me but not kneeling, along a honeycombed access way. Just as the exterior of the craft appeared to be seamless and was al rounded surfaces, so was the interior.

It also appeared to be made of the same material of the skin of the craft. I was

struck by the idea that it was almost as if the craft had been fabricated from melted wax and then cooled into this shape. Injection molding was the closest terrestrial machining or manufacturing process that I could compare it to.

On that lowest level, I saw three seats, similarly looking as if they had been part of the molding process and not manufactured separately and then affixed somehow to the rest of the structure. ffey reminded me of a Scandinavian chair, without legs, looking very much like a rounded ower petal, more cupped than a tulip's but nearly so. Just as the hangar had been lit so that we could see the craft's interior, so was the interior. ffe material only dimly re ected the lights, as if it had a kind of matte nish to it, but its color didn't appear to be layered on. Rather it was integral to the material itself. Integral and integrated were the two words that kept springing to mind. Whoever had designed and built this craft seemed to have no concern for aesthetics—at least not human aesthetics.

ffe three seats puzzled me. I saw no kinds of restraint systems, no indications of any life-support systems (vents, for example), and as I worked my way toward another access hatch, I was astounded by the fact that I saw not a single light, switch, dial, display or anything that I associated with a vessel that traveled through space. Al that interfered with the open design of this level, besides the seats, was a length of pipe coming down from the ceiling and exiting through the oor—presumably, the parts of the propulsion system that carried the power/gravity wave from where it was generated to where it was emitted. I was in awe of the technology behind this elegantly simple and purposeful execution of a craft designed to travel enormous distances, and with what seemed to me, to be based on the craft's construction, relative ease.

It was on the second level that I saw the now very familiar elements of the propulsion system we'd had access to in the lab. ffe reactor sat on the oor, the wave guide piping ran from it to the ampli er, and then additional tubing ran down through the oor to where, I imagined though I couldn't see them, the emitters sat on the bottom of the craft. ffat platform section, or what is probably better described as a pedestal, was what the craft rested on. How, or by whom, the craft was piloted and navigated was something that I was hoping to be able to see for myself, but neither Barry nor I were al owed onto

the third level where we presumed the pilot(s) would have been positioned. I had hoped

that I could have been able to sit inside what is traditional y termed the cockpit, but that wasn't going to be possible.

Frequently, when I was faced with a design or some other kind of engineering or diagnosis and repair problem, I liked to sit with that problem.

Often that meant walking away from the task at hand and just thinking about the issues or distracting myself with other work hoping that on some subconscious level I'd be able to come up with a solution. Other times sitting with it took on a more literal sense. I would sit near the device, or in the case of my jet cars and other vehicles—like the ones I converted to run on hydrogen—I sit in the "problem" and ful y immersed in that environment experience a kind of osmotic absorption of the solution to the problem. As cramped as the interior of that craft was—I imagined that the life forms who could move comfortably about in that space had to be about the size of a six- or seven-year-old human—I wanted to linger inside for as long as possible.

飘at possible wasn't too long since cramped conditions literal y can produce cramps, but I did take a few extra moments to marvel at the intel igence behind this execution and implementation of the propulsion system within the larger context of the craft itself.

I was blown away by what I'd seen. I'd been convinced for a while that what we were working with at S4 was not of terrestrial origin. But seeing this entire craft real y solidi ed what I'd come to believe. I knew with as high a degree of certainty that one can know anything, that we didn't have the capability, the Russians didn't have the capability, the US and the Russians working in concert didn't have the capability, al the world's greatest minds working together couldn't produce a working artifact like the one I was in. As I eased myself along to exit the craft, I kept shaking my head in wonder. My face had that half- ushed, half-swol en feeling of having smiled and laughed for too long. I brie y wished that I could share this experience with others.

At the same time, my attitude had evolved in the time I’d been working at S4. Initial y, though I understood the government’s and military’s position about secrecy, I resented it. Now that I was literal y and guratively on the inside of the operation, a kind of elitism set in. I didn’t think that many members of the American public could truly appreciate the magnitude of the achievement this craft represented purely on a technical, scienti c, and production standpoint. I was completely blown away, and I’d already been privy to a lot of information about the craft and its origins. Whether this craft

came from Zeta Reticuli or was a product of the drunken or febrile imaginings of the col ective membership of the 劒eta Tau engineering fraternity, it represented such an enormous advance in moving a life form from place to place that I struggled to come up with an analogy that would make sense to explain what it meant and felt like to be in its presence.

Once outside the craft, I disengaged the fawning fan mode in my brain and resumed scienti c inquiry mode. I wondered about the craft's structural integrity, given that the skin of the craft seemed so thin. I wondered how heavy the vehicle was, but I couldn't real y imagine myself putting my hands on it and trying to lift even a corner of that pedestal off the ground. I looked around the hangar and saw that a smal crane stood in a far corner. I walked over to it and saw that its load limit listed on a safety sticker indicated a maximum capacity of two tons. 劒at at least gave me a bal park sense of the craft's mass. I thought of the fuel discs again and wondered for how many hours or light-years they lasted and if the ship's interior was mostly used as a cargo hold for them. How long had the one we been using in our lab been discharging?

Barry and I stood again on the apron in front of the open hangar door, and I wondered if our mouths were hanging open. We didn't speak until we were back in the lab.

"Did you ever think you'd see anything like that?" Barry said. "Did anything in your life before this prepare you for that?"

"I've been trying to come up with a way to explain what this whole scenario is like, how to make sense of it for myself. 劒e only thing I could come up with was this: Imagine that we were with the settlers on the Oregon Trail, riding along in our wagons back in the 1830s. We go to bed one night and in the morning we see this machine that has two wheels, a seat, handlebars, and some device cradled in its frame and a chain going back to the rear wheel. We'd know it as a motorcycle today, but they'd only seen crude early bicycles. Given enough time, they'd probably be able to gure out how to get that motorcycle started and even to ride it a bit. 劒ey wouldn't understand

how the engine worked, and even if they did, once the thing ran out of gas, it was probably only good to them as a plow they could drag behind draft animals."

Barry nodded. "Something like that."

"More to the point," I said, realizing that maybe Barry didn't feel the need for that kind of explanation, "I didn't see any signs of crash damage."

"Listen," Barry said, "I was never a believer in the whole Roswel incident. I don't fol ow those kinds of stories. It seems strange to me that an intel igence that is advanced enough to produce what we just saw wouldn't be able to negotiate the Earth's atmosphere or have a landing system gured out or not be able to cope with our weather systems and phenomenon."

"I agree," I said. "Just doesn't seem like a plausible explanation."

Barry and I debriefed for a while longer, and we both postulated about how the propulsion system worked. We weren't any closer to guring out how we could reproduce the devices to produce the kind of gravitational eld we surmised was at work, but we had a better sense of how the reactor, the ampli er, and the emitters worked to produce a kind of antigravity effect that would al ow it to render our usual concepts of space and distance immaterial.

Without realizing it, we were on the verge of doing something that I had only presumed was possible, witnessing the craft in actual operation.

剱e next time I was cal ed into report (I stil kind of chuckled at the insistent regularity of the message, "Hel o, Mr. Lazar it is now [insert time].

We expect you to be at the instal ation at [insert time]."), Barry and I got busy working with the modi ed pressure sensor instruments we'd devised. We were about to use them to measure the intensity of the gravitational eld when Dennis stepped into the lab.

"Fol ow me," he said.

We went outside and sitting in front of the open rst hangar was the craft we'd recently examined. 劒is time, and it struck me as odd, each of the interior doors connecting the individual bays, was open. In addition to the craft that we'd been al owed to inspect, I could see eight more saucer shapes through the procession of openings. I wondered brie y if we were going to be al owed to see al of them. Each of them looked to be of similar shape, and it wasn't just because of the distance I was from each of them, but they appeared to be of slightly different size. 劒e one we'd inspected was smal er and sleeker than the others, as if it was the sports car in the line-up. In fact, from that point onward, I always thought of and referred to the craft I was able to enter as the

"Sport Model."

"A low-performance test is going to be conducted. We thought the two of you should see this," Dennis said.

I looked over at him trying to see if he was pleased by his having made arrangements for this, but his face was impassive. I remembered the look of

irritation on his face when I'd remarked that the military was stil doing things then they way that they had nearly fty years earlier out at Los Alamos and in Chicago and in other locations trying to create the atomic bomb. Al that compartmentalization and secrecy had slowed progress. If they wanted us to be effective, they needed to let us share information. 劒at was how most advances in science and technology—despite the belief in the romantic notion of the lone wolf working in isolation model—were made. Here we were getting some access, greater access to information than before, but stil in a far more limited manner than I would have preferred.

I knew it was time to keep my mouth shut and just observe, and that's what I did. What frustrated me was that with the exception of Dennis, Barry, and I, there were few other S4 personnel around. 劒e omnipresent security guys were there on the periphery, but there was one technician there sitting with a pair of headphones on while seated in front of what must have been a radio, and one other man who stood at a distance from us and kept his back to us the

entire time. I stood there with my arms folded, rocking back slightly on my heels, and then the craft did something similar. At rst I heard rather than saw any activity coming from the craft. A loud hiss, nothing painful but the kind of buzzing sound that an electric substation might produce, reached my ears.

ꠇen the craft lifted off the ground slightly, wobbling, the central axis tilting a few degrees from vertical. As it lifted off, I could see the blue glow of a corona discharge coming from the bottom of the craft.

ꠇat led me to believe that the air around the bottom of the craft, where we suspected the emitter was, was being broken down and photons were being emitted. ꠇe light was visible, just as lightning in the sky is, due to that incredible high-energy output. As the craft rose, the slight oscil ations lessened and the hiss diminished. By the time it was thirty to forty feet in the air, lifting nearly perfectly straight up, the sound was completely gone. In al my years of working with jet engines and pyrotechnics, I was accustomed to hearing loud noises as objects were being propel ed upward or forward. ꠇe silence was eerily exciting, and I felt a broad grin spreading across my face. I could hear the faint sound of an appreciative expulsion of air coming from Barry as I stood there wide-eyed and mind-boggled.

I could see that the craft had three emitters. Only one was creating the corona display and it was the one that was facing straight down at the ground.

As the craft rose in the air, the display expanded. It began as a tight beam and

became more diffused with each foot the craft rose. It was like watching someone twisting the lens of a ashlight, increasing the size of the circle of the light from its narrowest to its widest focal range. As that gravitational wave spread out, it helped to stabilize the craft. It hung there, completely stil , as if it were suspended there by an invisible steel rod rmly anchored to the ground and some point above it.

With it hanging there above us, we could see more clearly the bottom of the craft and its triad of emitters. ꠇey were arranged in a pattern with the one that was functioning at the point of the equilateral triangle. ꠇe other two emitters pointed at a right angle to the downward pointing one. Given this

orientation, because we were looking up at the larger spherical shape of the craft, I decided to think of the area to the left of the downward pointing emitter as the rear and the area in front of the two other emitters as the front or forward section. 劒at was because the opening of the two forward emitters pointed in that direction, and from what we believed of how the gravitational wave was produced, the energy coming out of the open end of the emitter would al ow the craft to move in the same direction as the opening. I knew this was a low performance test, but stil I was hoping to see the craft maneuver in the air. It didn't. I looked over at the technician with the radio. He was far enough away that I couldn't hear him speaking into a headset, but I could see that he was talking, presumably to whoever was piloting the craft. I thought again of the cramped space inside and the childlike proportions. I also wondered how in the hel a radio wave—an electromagnetic wave—would be able to work in the presence of that gravitational wave. No kind of phase-locked loop should have been able to "survive" in that environment. 劒e electronics guy in me engaged in a brief battle with the physicist in me over which phenomenal phenomenon to focus my attention on.

I didn't have long to contemplate them. After a few minutes of hovering in place, the craft descended and settled, reversing the process of moving from a stable orientation to a wobbling one before coming to rest.

"劒at's it," Dennis said, always the master of understatement. "Time for you guys to get back to work."

Barry and I did as instructed, both of us lost in thought for the next fteen or so minutes. We each sat at on a stool in front of the lab bench. Barry scrawled a few lines in a notebook while I ddled with a micrometer, measuring the thickness of the lead points of a few pencils and comparing

them to the lead rods I used in a mechanical pencil. It didn't seem odd for us to be so quiet. While engaged in work, we both tended to go inward. We'd both witnessed something on the order of a miracle—if one accepted the de nition that a miracle was the result of an agency from outside our terrestrial realm—and we both needed time to process what we'd seen. I suppose in some Hol ywood version of these incidents, the two of us would have

charged into the lab ush with excitement and gone to the blackboard and started furiously writing and erasing parts of a complex equation we'd left there while exclaiming loudly, "I've got it. I can't believe I didn't see this before!"

ꠋe truth was that since we'd started working, we had a sense of what was going on with the reactor, ampli er, and emitter. ꠋe ight demonstration simply con rmed that our theory was, for the most part, correct. We hadn't seen the craft move lateral y nor had it covered a great distance in a short amount of time, but the fact that the device created a focused beam (for lack of a better term) of highly concentrated energy and a gravitational eld, that it could also disperse more widely, would al ow it to "cover" vast distances. I had suspected that the gravitational eld was doing something that scientists and science ction writers had been speculating about for many years. It was producing a kind of negative gravity, or antigravity that, in a sense, "removed"

the gravitational force ahead of the direction in which the three emitters were pointing. In time, Barry and I came up the name "Omicron," to describe the action of the single downward emitter functioning to lift the craft above the ground. ꠋat Omicron action al owed it to initial y escape the gravitational pul of the very large body it was near—the Earth. When al three emitters worked, the same antigravitational force was produced al owing the craft to move in multiple directions. ꠋis omnidirectional state of operation we termed

"Delta."

We chose Omicron, the fteenth letter of the Greek alphabet, because it means "smal ." In the Omicron state, the craft and the propulsion system con gured in this single emitter operation, could only make relatively smal moves. Delta, the fourth letter of the Greek alphabet, has its symbol used in science to indicate change. And we believed that when the three emitters were arranged in a kind of delta shape as they were, it al owed the craft to essential y move freely and change direction with stupendous rapidity that made our current capability pale in comparison. How the emitters worked was stil in

question, but orienting them in various directions was similar to how our

spacecraft worked. It wasn't so much that the system de ed our understanding of the laws of physics, its ability to move as quickly and as efficiently as it did was astounding. Essential y, when the propulsion system created that gravity wave or antigravity state, everything we knew about how objects could orient themselves in space, about the nature of ight, was altered. It was easy to get hung up on language and whether a gravity wave was being produced or if it was antigravity, but essential y, on a fundamental level, what the makers of this craft had done was create a device that could achieve something astounding—

gravity control. It reduced or cancel ed a gravitational eld. No one on Earth had been able to do that to that point. It had been speculated about and hypothesized about, but it had not been achieved as we sat there in 1989.

Words fail me now, as they did then, to explain how great a paradigm shift in thinking was necessary to truly appreciate what we'd just witnessed. 劒at said, as had been true for most of my adult life, I was able to come up with an analogy to explain in layman's terms how this process worked or at least to create a visual metaphor to illustrate it.

Imagine placing a bowling bal on a level mattress. It would sink into the cushion for a bit before settling and becoming stil . If left undisturbed, the bowling bal would not move. You could push that bowling bal and get it to rol . In a sense man's early efforts at ight were like that. We used a propel er to push air behind the plane to get it moving, used the angle of the wings and their surface area to create lift, and the airplane would leave the ground. With a jet engine or a rocket, we expel hot gasses out of the rear of the engine to push the plane forward and create lift. What this alien craft did was like placing your hand on the mattress in any direction around the bowling bal and compressing the cushioned material. 劒e bal would rol in the direction of where the resistance had been removed. A somewhat crude analogy but sufficient to understand the basics. What the emitters were able to do was to remove the force of gravity, not just in a tight beam enabling it to move forward, but widening the beam, and having the emitters pivot in various

directions was akin to having a group of people standing around that mattress each of them pressing down on the cushion at various points, al owing the bal to move in multiple directions. Imagine those individuals moving with great speed and force, superhuman speed and force, and the visual becomes even better.

I didn't share this analogy with Barry. He showed little interest in my previous motorcycle-dropped-in-among-the-settlers scenario. What was far less difficult to imagine was how this craft was able to cover vast distances. In a sense, it didn't cover any ground—as we so frequently describe an object moving from one point to another by going over ground from point A to point B. Instead, using that gravity control, this craft pul ed distance objects toward it. Imagine a bal resting on a towel with a Frisbee at the opposite end of the towel. With the emitters in the Frisbee doing their thing, the fabric of the towel was pul ed toward the bal that was anchored to it. It was as if the universe was being folded in an accordion-like fashion. As I noted when I rst saw the propulsion system functioning, time and gravity are inextricably linked. If you control ed gravity, you also control ed time. 劒at solved the dilemma we currently have with long-distance space travel. How could you possibly supply humans with enough oxygen and food, but even more so, how could you expect them to outlive our usual life span, in order to travel to distant galaxies. What this propulsion system did was render moot al those kinds of questions.

Normal y, Barry would quickly shut down any kind of speculative questions about the origins of the device we were working on. He was far more disciplined in his thinking and with his emotions than I was. Fol owing that demonstration, though, even Barry's mind was spinning.

"You know, I'm not sure if what they told us is true. But after seeing this, it opens up a whole universe of other possible explanations. I mean, I was sitting here thinking that this thing could have come from another dimension. It could have come from some point in the future. We just don't know. 劒e whole Zeta Reticuli story could be a cover-up. I just don't think we've got the advanced technology to produce this ourselves in this time. Not even with the assistance of the Russians or teams of scientists from everywhere."

“I agree, but you know, Barry, like you always say, if we keep thinking about that part of it, we’l go crazy.”

Barry laughed, “You’re right. Kind of fun to think about, but we aren’t here to have fun.”

Frustratingly, as Barry and I talked about this gravity control device, we kept coming back to the same question over and over again. How was it able to produce such an enormous amount of power from such a simple system without the production of any kind of heat and sound and other indicators of

the prodigious amount of energy being used to overcome what we on Earth considered to be one of, if not the, most fundamental forces in the universe—

gravity. How could something seemingly so simple and fueled by such a simple and smal object as the discs do that kind of work? In a way, I wondered if perhaps it functioned on the principles of some martial arts—using your opponent’s energy against them, in opposition to them.

Ultimately as our discussion wound down and the frustration of feeling as if we’d returned to square one and were no closer than ever to being able to reverse-engineer the system, it felt pointless to construct ways in which to describe what was going on. I’d heard it said that language al ows us to master and take control of our world, to give it shape and meaning. Al I could think of as the hours went by and the lights above us hummed nearly as loudly as the craft had, was that a mechanical pencil produced a point far less sharp than a pencil sharpened mechanical y. At that point, I wondered if maybe I was losing my sanity as more and more divergent and unproductive thoughts passed through my mind. After al , Einstein said, the de nition of insanity is doing the same thing over and over again expecting a different result.

I was more than a little relieved to go home that night. I was tenacious when faced with a problem that needed to be solved, but now I was frustrated and intrigued, and the push-pul of those two competing forces would ultimately be won by another force, one that was far beyond my control.

CHAPTER

SEVEN

ADDED INTO THE MIX OF ALL THE QUESTIONS I HAD regarding my situation came another and more frustrating question. Why was it, that after granting me access to the craft and al owing me to view a test ight, did the voice of the EG&G representative suddenly fal silent? I'd experienced one fal ow period in my time with EG&G and been rewarded with those two opportunities. Maybe, I tried to console myself as week one of no cal s turned into week two, I'd be similarly rewarded again. What form that reward might take occupied some of my time when I wasn't working, but not nearly enough.

Tracy seemed very occupied with the business, her ying lessons, and her social life. She sensed that something was not right in my world, but when she asked me what was wrong, I told her that I was ne, that nothing was in any way out of sorts with me.

劒e devil's bargain that I signed in agreeing to a con dentiality clause required that I not divulge anything, good or bad, a potential state secret or a simmering dissatisfaction with a co-worker, the quality of the food in the cafeteria, the frustrations with having to respond on a moment's notice, the havoc the irregular schedule played with my sleep, were al equal y off limits.

I'd put up with the unannounced visits to my home, agreed to have my privacy violated by al owing our phones to be tapped, and wasn't even raising a fuss about the fact that I'd yet to receive a paycheck. Al I wanted to do was work and to contribute to solving this problem, and I was being subjected to what I thought was a kind of tantalizing treatment. 劒ey'd tease me with privileged glimpses then back away again.

Also, for as much as I'd witnessed and believed, and now believed to a greater degree the truth of what I'd read in the brie ngs and later seen with my own eyes, there was stil the possibility that I was somehow being set for a fal
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What the nature of that fal was and why I'd been chosen wasn't clear, but I wasn't wil ing to dismiss anything as a possibility. After al , if my mind had

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been blown away and my perceptions opened by what I'd seen and learned while working at S4, then I would be foolish to believe that only the most righteous and above board and honest dealings with the employees at S4 were being conducted. Put another way, when your belief system in one part of your life is rocked, (that aliens existed in theory but not in actual fact) and now knowing that "visitors" from outer space had been on the planet, that seismic upset reverberates in other parts of your life as wel . Maybe if I had someone with whom I could share what I'd experienced, another perspective to help me sort through al of this upheaval, then maybe I could have found a better way to respond to what happened to me as the Ides of March passed and I grew more and more anxious and uncertain about my future.

Even now, many, many years after those events in the early part of 1989, do I stil wonder many of things I wondered back then. Hindsight general y affords us an opportunity to see things with greater clarity, growing older and having more experiences can make us wiser, but I stil have trouble establishing a rm footing about whether or not the path I chose to take was reckless, wrong-headed, self-sabotaging, or right. Perhaps it was al of those in some combination. As a scientist, I was trained to look for and to nd truths. But we al know that even in the scienti c community and the undertakings made under that umbrel a, there is much that appears initial y to be black and white and absolute, but later is revealed to be more gray than white or black.

I write this as a way to preface what was to prove to be the unraveling of my life. I paid a heavy price, as did others, and I take ful responsibility for my actions and regret deeply those who suffered col ateral damage as a result of them. I won't go into much detail about the "civilians" who were affected; to do so would only open old wounds and expose people I care about to additional discomfort. In some ways, I wish that I had taken this notion of col ateral damage into ful er account during those weeks in March of 1989

when I grew increasingly impatient and resorted to self-preservation as one of

the central movers in my decision making.

GENERALLY, I'M NOT A VERY PARANOID INDIVIDUAL. I NEVER had a reason to be.

But after learning what I had and seeing those demonstrations and crawling around inside that craft, and then not being cal ed in for a week or so, just at

the time when we seemed to be making progress and I was being given very exclusive access, I started to real y wonder what the hel was going on. After al this transpired, someone told me that the writer Wil iam S. Burroughs once wrote, "Sometimes paranoia's just having al the facts." I wasn't aware of that quote back in 1989, but I had some thoughts along that line.

To contribute to my growing uneasiness, the house continued to be under surveil ance. I did the best I could to ignore it, and I de nitely didn't look at it as the positive sign I once had. I suppose that back when Mike 劒igpen interrupted the meeting I was having with Wayne and his wife, when our deal for the photo business was stil pending, I probably was engaged in a form of wishful thinking. 劒eir search of the premises was very odd, mostly because as far as I knew, and Tracy had pointed this out, no one that we knew ever commented on the fact that they had been contacted by any agency. Not anyone in my family, no friends, no former employers or col eagues, no one let me know that they'd been questioned about me. 劒at was very odd.

A few days after witnessing the low performance test, I was at home getting ready to go out on a delivery run. I stood at the kitchen sink rinsing my coffee cup and saw either a Buick Skyhawk or a Chevy Nova sitting across the street from our house. Whatever the make and model, it was one of those nondescript, bland kinds of cars that I seldom saw in our neighborhood. Inside the car sat two men in dark suits. 劒ey were looking straight ahead. I didn't see them using binoculars or a camera with a long telephoto lens, but I was pretty sure they were there watching our house. 劒at suspicion was con rmed when I exited the house and then drove off to drop photos by at Gene's office. 劒e car pul ed out behind me, and unlike in thril ers or police procedurals, they made no effort to disguise the fact that they were fol owing

me. 劻ey didn’t keep more than a car length or two behind me, accelerated to keep my pace, and went through a yel ow light I purposely slowed down for and then sped through. When I got to Gene’s office, the car parked a few spaces away. I was thrown off balance by it al , but managed to pul myself together and didn’t let on to Gene that anything out of the ordinary was going on.

Gene and I transacted our business, and I went on with the rest of my day.

I had to make a stop at Home Depot to get some supplies for a repair project on a leaky showerhead, and the mystery car was there again, trailing behind me. Like the car, the two men were bland and relatively nondescript.

Caucasian, mid to late thirties or early forties, dark suits, white shirts, and

sunglasses doing battle with the morning’s low sun. I almost had to laugh when I thought of recounting that description to anyone, like I was some hard-boiled detective in a noir detective lm. It wasn’t so funny when they fol owed me home and then remained there, until another car and two men came to relieve them, early in the evening.

When they were stil there in the morning, I decided to cal the police. I recounted to them what I presented above, including the terse description. 劻e officer who took the information assured me that she would pass it along and to expect someone to come to investigate the situation at some point. It must have been a slow morning in Las Vegas. No more than a half hour later, a squad car approached the vehicle and then parked behind it. A minute or so later, the officer got out of the car and approached the driver’s side of the vehicle that had been sitting there. I wasn’t able to hear or see much at al , but within minutes, the officer was back in his car and drove off. My “watchers”

remained. While al this was going on, Tracy had come downstairs and was getting ready to leave for work.

“What so interesting out there?” she asked.

“Not sure. 劻e police just pul ed someone over brie y. Gone now.”

“Are you turning into one of those kinds of guys,” she said, teasing.

“What do you mean?”

Her eyes revealed her amusement. “Oh, you know. 劻e ‘stay off my lawn’

kind of cranky guy who watches over everything in the neighborhood.”

Not wanting to reveal my concern I played along. “No, not one of those guys. 劻e kind of guy who buys a police scanner and monitors al the activity going on around the city. Your guy is way too low-tech for me.”

She narrowed her gaze at me, unsure, it seemed, if I was kidding or not.

“I’m surprised you haven’t gured out how to make one, or maybe that’s just one of your projects.” She used her ngers to make air quotes around the last word.

“An idle mind,” I said, reminding her of the famous Ben Franklin quote.

Tracy left a few minutes later, and my mind was not idling at al but racing.

What had gone on between the police and the observers? Why hadn’t they come to speak with me? I’d given my name an address and phone number to the person on the phone. Was I going to get some kind of response to my complaint? Was I going to be fol owed the rest of the day and for how far into

the future? What did al of this have to do with what I most recently witnessed at S4, if anything?

I decided it was best to just go about my business. I could see how easy it would be to get too worked up about it al . I had planned to meet a friend named Mario at a local gym. He and I were workout partners. Every other evening, usual y Tuesdays, 劻ursdays, and Saturday we met and did some cardio work or some weight lifting. Maybe a workout would help relieve some of the stress and help me put things in a better perspective. I pul ed into

the parking lot a few minutes after six o’clock and waited.

I thought about the previous time Mario and I had met there. We exercised and then left.

I had walked over to my Datsun 280Z and, while chatting with Mario, pul ed out my car keys and went to unlock the door. I inserted it but noticed that the door was already unlocked.

“ꠇat’s weird,” I said.

“Yeah, it is but in Japan—” I cut Mario’s explanation of sushi off. He’d been tel ing me about the new restaurant he’d just gone to.

“No, my car. ꠇe doors are unlocked. I never do that.”

“No, you don’t. ꠇat’s your baby. You treat her right.”

At the time I attributed it to just being tired.

ꠇat night, Mario was running a bit late. I got out of the car after Mario had walked up to mine. I got out, locked the doors, and then lifted the handle.

“ꠇey’re locked, right?”

“Far as I can tel ,” Mario said.

We both wanted to be home at bit early, so we cut the workout short.

About forty- ve minutes later, we walked out of the gym. I took a few steps into the parking lot and then stopped in my tracks. I looked across the way and there was my car with both its doors wide open, looking like a xed wing aircraft.

“Holy shit,” Mario said. “What in the hel ? You got broken into.”

I stood there frozen in place, my mind ratcheting through several possibilities. It could have been a car burglary. ꠇe Z had a decent stereo in

it.

I had left my wal et and the Uzzi I was carrying around for protection inside it.

It seemed strange to me that a thief would leave the doors open. Why leave a

“Hey look what I’ve done!” cal ing card. Had they been interrupted in the middle of the job? None of that made sense.

I’d con ded in Mario about my work situation and I think that though it took him a bit longer than it did me for it sink in, he got it.

“I don’t know if we should walk over there. Who knows . . .” He let the thought drift on the night wind.

劒e car did have central locking but a malfunction of that system wouldn’t have al owed the doors to open and the hatch to rise. Somebody had to open those doors and I had a strong suspicion the men who had been fol owing me were sending a message. We’re stil here. I can’t say that my blood ran cold or a shiver ran down my spine, but I did experience that gut-level twinge and burn of adrenaline kicking in. I had to ght the urge to jump in the car and take off after them, let them know what it was like to be pursued and fol owed. I knew it wasn’t a good idea to en ame the situation. Look at what happened when I cal ed the police.

Mario and I both jumped a bit when the doors behind us opened and rattled. A couple of other gym members walked past us.

“I guess I need to go over there,” I said.

“Yeah, you do.”

We walked over to the car, and I kept tel ing myself that I had nothing to worry about. I was de nitely spooked, and I could tel that Mario was as wel .

“If you don’t mind,” I said, “I’d like your help.”

“With what?”

“We’re going to have to start the car. 劒at’s your job. I’m going inside.”

We both laughed.

劒ey’d sent a clear message, a sign of the kind of power and control they held over me. 劒ey didn’t like being messed with. I didn’t like being messed with either.

I decided the best course of action was to try to de-escalate the situation. I needed to get better control of my state of mind as wel . After al , I had no con rmation yet that I was no longer going to be working at S4 or anything like that. I had Dennis’s phone number, so I decided the right course of action was to go to the source and not let my mind run away with me. After al , I also told myself, nothing had gone missing from the car. I got someone in Dennis’s office and explained that I wanted to speak with him. After being told that wasn’t possible at the moment and getting a vague to no response at al to my fol ow up questions about when he might be available, I left a message

indicating who I was and that I very much would like to speak with him at his earliest possible convenience.

On and off for the next few days, I noticed that the car would be outside our home, but the fol owing stopped and nothing bizarre happened while I was out and working on the last few of the photo jobs I was taking on. When forty-eight hours passed and I didn’t hear back from Dennis or anyone at the number he’d given me, I made another inquiry and left another message.

When the tailing resumed and my cal s stil went unanswered, I started to worry even more, and not just about whether or not I would continue to work for EG&G at S4, but about my own safety and Tracy’s and other people I knew. I didn’t believe then and don’t believe now that my fears were the product of an irrational response to stress. Was I stressed?

Certainly.

Greatly.

Undeniably.

Was it plausible to believe that because of what I knew and what I had seen that some harm could come to me?

Yes.

De nitely.

For as much as I tried to focus just on the task at hand, the implications of what I'd experienced and knew had tremendous consequences. 劒ey wouldn't have been going to the lengths they were to do background checks on me and they wouldn't have required me to consent to my phones being tapped, and they wouldn't have asked me to sign a document that essential y stated that I agreed to waive every one of my constitutional rights (which I did sign) if there wasn't a serious need for them to keep this information in-house by whatever means necessary. 劒at may seem like a large leap in logic, but given al that I've described about the need for me to carry a weapon, the heightened drama with the surveil ance teams, I gured that I had to do something to protect my best interests. No one else was going to do that, so it was incumbent on me to think ahead and consider wisely what I should do to protect my professional reputation, my chances of getting gainful employment elsewhere, and the physical safety of me and others.

Only later, after I made the decision to share what I knew with a select few friends and later more widely, did I think more about the public's right to know this kind of information. I never set out to be a crusader, and though

some cal ed me a whistle-blower, I blew the whistle initial y almost exclusively as an act of self-preservation, whistling to cal attention to me to make it less likely that harm would come to me if I made clear what I knew, than it was to draw attention to the program at S4 and reveal the nation's deepest and darkest secrets.

Al of those thoughts got generated in my head, were ampli ed, and were only

emitted when I felt pressed into a corner and had to do so. I knew that Gene was the rst person that I should tel . He was my closest friend at the time and he was about as level-headed a person that I knew. I felt that he'd believe me, and, because he didn't have as much at stake personal y as Tracy did, he'd be better equipped to give me some guidance about how I should proceed. I had a few vague thoughts in mind. I was con dent that everyone who knew me would believe me, but stil thinking about the possibility that I might wind up somewhere in the Nevada desert with a bul et in my head and a fabricated suicide note left at home, I was leaning toward showing them evidence to prove the existence of those craft.

Sitting in Gene's car as we drove along Alta Avenue was both comfortably familiar and surreal. I prefaced my story with the kind of disclaimer you might expect, "斸is is going to sound real y strange, but. . . ." When I was done, Gene said that coming from anyone else but me, he'd be incredibly suspicious.

斸en he added, "I knew that something was up when you told me about the gun registration and mentioned something about work. I couldn't have imagined that it was something like this. But, hel , who knows what kinds of things go on out there. I gured the UFO stuff was just a bunch of wahoos with nothing better to do with their time."

I didn't mention to Gene anything that I'd read in the brie ngs. For this rst time speaking with someone openly about what I was doing, I wanted to stick to what I could de nitively validate—what I'd seen, what I'd done, what had been done to me. As tempting as it was to go beyond those three categories of events, I refrained from doing so. As I pointed out before, Gene was an immensely curious man with wide interests, and his curiosity was re ected in the half-dazed, half-enthral ed look that spread his face.

"Just so you're aware, Bob. I'm going to do a little digging around on the subject. Not to undermine you or anything, just because you've got me thinking."

"Gene, you're a free man in a free country, and I would never think of tel ing

you what to do or how to go about it. 飏anks for listening to me."

"No worries. Tracy know?"

"I haven't told her yet. Obviously, I want to keep as tight of control of al this as I can. At this point, I don't see the sense of pissing anybody off."

"You think you might have already?"

"I can't imagine how. Like I said, they let me on the craft, they let me see it low y, and now nothing and some harassment. 飏is is al just so nonsensical."

Gene nodded. "Hard to gure. Sometimes an irrational response is the only one you can make to another irrational act, but I don't think that's wise here."

"Agreed. I'm sure I'l need to talk to you about this again. I hope not, but even if I did get cal ed back in, I'm not sure how I'd respond."

"飏at's understandable."

"I just don't know if it's al worth it." I produced from my pocket an envelope that contained the rst and what would prove to be the only check I ever received. I slid it over to Gene.

"$958.11?" he said, "飏at's what the United States Department of Naval Intel igence pays a senior physicist?"

"飏at's right. You do it for the love of it and not to get rich. And to be honest, Gene, this isn't so much about the money as it is the headaches. If I'm getting this kind of a runaround and treated like this, the dol ars-to-headache ratio is way out of balance."

Gene and I talked for a few more minutes and then he dropped me off at home. When Tracy got back from work, I inadvertently used the words that anyone in a relationship shouldn't use as a point of entry: "We need to talk."

By the time I made it clear what the subject was, al the tension left her body.

She sat on the couch, drew her legs up and heaved a big sigh while looking at the ceiling.

“ 劒is isn’t some kind of goof is it? You’re serious. I can always tel when you’re trying to get me.”

“No goof. No getting you.”

“Holy shit,” she said, drawing out the “Holy” for a few seconds. “ 劒is is nuts.”

“Essential y, yes.”

“I can’t see you making up something like this.” She drew a strand of her hair to her mouth and chewed on it, a habit she had when she was nervous. I

hadn’t told her everything about me being fol owed and the incident at the gym parking lot, hoping to spare her some worry. Later on, I’d come back to this moment and see it in a different light.

Of the three people I spoke to about my concerns, John Lear was the most receptive. 劒at made sense given what he believed to be true about UFOs back at that time. I’d later come to learn more about the extent and the extremity of John’s controversial views, but in those rst few minutes, he, like Gene, seemed more curious than alarmed.

“Look,” he said rubbing the stubble on his chin and neck, “We al know that something’s out there.”

“In the desert?”

John winked at me and said, looking from side to side as he did so, “Yeah, in the desert.” He raised his eyes toward the ceiling indicating that it wasn’t real y just the desert he was talking about.

I looked around John’s home office. 劒e bookshelves were lined with various volumes of different types and sizes. In the corner, a telescope rested on its

tripod and leaned against the wal . Along one wal were a series of framed certi cates and awards John had received for his exploits as a pilot, among them some commemorated world records he had set. John was an accomplished pilot, more than an accomplished pilot actual y, he's was fearless and also a bit reckless. Of course, once I got to know John, he shared with me the story of how he injured his feet and legs to such a degree that at times he hobbled around his home in Las Vegas. His father had created a manufactured updated version of a Lear Jet. (Over time the model designation has escaped my memory.) John was assigned a simple task. Do a ight demonstration for some clients considering acquiring the jet for their use. What John heard and what he listened to were very different things. Instead of an easy conventional demonstration of a take-off and landing and ight, John asked himself since this was the latest and most improved version of the jet, and highly capable, why not show just how capable it was?

He decided to do an outside loop, a very, very chal enging and risky acrobatic maneuver. As John told me, once you committed to the move, you couldn't back out. Wel , John committed, didn't back out even when he knew that he was in trouble and plowed the jet into the ground sustaining multiple leg injuries among others. John wasn't someone who was going to play by the rules, but I did trust him. In fact, I trusted him enough to take trips with him

when he had to ferry commercial jets to one airport or another (he asked me along both for company and to wear a suit so that I could pass as an FAA inspector). Once aloft, John would light up his pipe, later to doze off completely with the autopilot of the L1011 functioning, and then wake up just in time to land the craft manual y. I also trusted him with Tracy's life, and he gave her the rst few ying lessons she had. He even al owed her, at one point, to take the controls of a commercial ight he was piloting.

To say John was a loose cannon is an understatement, and in looking back on it now, I can see to what degree how stressed and anxious I was to believe that John was someone who could help me put events into their proper perspective. By that I mean how I should approach the situation vis-a-vis my employment prospects. In terms of having someone who could assess the capabilities of the craft and determine whether they were anything in line

with what terrestrial technology could produce, I knew of no one more quali ed than he was. 劒ere was some risk inherent in sharing this information with John, but I also knew how much he believed in the existence of alien spacecraft and beings. My focus remained purely on the technology, and if John could offer any insight into that, then it was worth the price of having him possibly go off on tangents regarding the beings who produced that craft. I'd be able to tune that out.

劒at's not to say that he wasn't an interesting guy to be around, and he demonstrated his generosity toward me on multiple occasions. Stil , John had his own theories about extraterrestrial life and government conspiracies that I can see now, in hindsight, predisposed him to believe what I was tel ing him. I also want to make it explicitly clear that he never urged me to do anything. He simply accepted an invitation to participate in acts that I instigated.

I was grateful that, for a few days at least, things seemed to settle down. No strange incidents occurred, and though the guys on over-watch were stil around the house, I wasn't being fol owed—at least as far as I could tel . I supposed that in retrospect, I inadvisably let my guard down a bit. One afternoon, two days after letting Gene in on my secret, we were at his house.

Over lunch, he told me that he'd been searching the Internet for information about UFOs. 劒is was stil early in the life of the Internet and information was relatively scarce compared to how it has proliferated. He told me a number of things, none of which real y jibed with what I had witnessed, and even back then, we realized that you can't believe much of what you read on the Internet.

We continued chatting, and I asked him about the source of the information he shared with me.

"劒ere's two places in particular that seem to be gathering points. One is cal ed MUFON—the Mutual UFO Network. 劒e other is CUFON—the Canadian UFO Network."

"劒at's not very Canadian of them," I said, "You'd think the kindly Canadians would want to be part of the Mutual network."

We got to laughing and joking a bit more and it felt great to breathe easy for a bit. Eventual y, Gene decided that since I had the real deal in terms of UFO information, I should be referred to as BUFON, for the Bob UFO

Network. I countered with him transforming himself into GUFON, for obvious reasons. For the rest of the time we spent that afternoon, we continued to cal each other by our new noms de UFO.

Gene's wife had given birth to a son on March 15th, and Gene was giddy with delight and sleeplessness. It was good to be around someone who was in such good spirits. He was grateful for the break from the routines of a young one and visitors. Somehow, al of this made me think that maybe my world had somehow been righted.

飏at feeling didn't last. I woke up before sunrise to see that the car was stationed in the same place it had been before. I wasn't physical y tailed, but it was exhausting to feel as if my every move was being watched over. When I got home later in the day, Tracy was out. I felt like I needed to commiserate with someone. Deciding to not let on how down I was, I cal ed Gene. When the answering machine responded, I said, 'GUFON this is BUFON. I have the baby pictures for you. I know you need them as soon as possible." Gene hadn't given me any photos and I hoped that he'd pick up on that right away. I sat there hoping he'd cal back. In the interim, about forty- ve minutes later, a car came into our driveway and braked hard. I heard a couple of car doors slam and then a rapid knock at the door. I answered it and two very official and distressed looking men in suits escorted me to the kitchen table. 飏ere, they began their interrogation.

Basical y, they wanted to know who this BUFON character was or what it was code for. 飏e same with GUFON. 飏ey then produced a printed copy of the message that I'd left for Gene not quite an hour earlier. I couldn't believe how quickly they'd gotten it and then gotten to the house. I was tempted to ask them about how they managed that task, but I could see they were in no

mood for light-heartedness. I told them that they were just goofy names we'd made up a few weeks ago. We were in a sil y mood at the time and that was

it, nothing sinister at al . 劒at seemed to appease them, but they produced a document that they made me l out. I had to identify Gene by name, provide them with his mailing address, phone number, and other information that I was sure they already had. I also had to refer to Gene by his last name, Huff, and then add, Gene Huff, AKA GUFON. To this day, and even back then, Gene and I stil laugh about that incident. Gene wil stil , on occasion, sign his name and then append it with AKA GUFON.

Even though I was amused by that incident, I stil felt like lines had been crossed. I'd agreed to the wiretap, but that was to determine my suitability for a security clearance. It no longer seemed certain to me that they would conclude that I was a good candidate to work at S4, so I thought the investigations should cease. I'd also essential y signed away my rights to due process under the law. I'd been trying not to think of that while al of this nonsense was going on and had never mentioned that fact to Tracy. When I had told Gene about that, he said, "I'm not surprised you signed that document, but I sure would be worked up about it. You don't respond to things like that the way the rest of us do." Hearing him say that made me realize even more that I needed to bring this thing to some kind conclusion. If I wasn't able to keep my wits about me in the way that Gene had indicated I had in the past, it was time to make some changes.

In the initial interviews I'd been asked a lot of questions about how I managed stress, and I'm sure that my phone cal s to Dennis's office—I'd made a few more with no success—cal ing the police, and now playing name games, al contributed to my sense that my days at S4 were over. I can see now that I did those things for another reason—I wanted the wait to end. I just wanted to be told yes or no and move on. I knew that security clearances could take time, but it was the frustrating stop and start of the work, being pressured to gure out the answer but not being given the proper time needed to solve it, that made me get to the point that I wanted something de nitive to be said or done. It may be hard to believe, but co-existent with those feelings was a desire to see the job through. I can't say it was as strong as it had been before, but by stil wanting to do the work, and not being able to do the work for no reason anyone could real y offer, ratcheted up my anger at being put in that situation.

I decided to take action. As I pointed out, I wanted my wife and friends to have eyewitness certainty about the claims that I had made. 劒at meant one thing—getting them out to the area to see a test ight. For years people in the area had reported strange lights and other activity in the sky. Because of my time in the lab at S4, I knew when one of those displays was going to occur.

Wednesdays at eight in the evening was the usual time a high performance test ight was going to be conducted. I informed the rest of the others that I thought we should al drive out to the desert to witness one of those tests.

John Lear owned a Winnebago motorhome, and he volunteered to drive us al out to the perimeter of the base. In some ways, I thought that maybe including John wasn't the best idea. 劒ere was also some odd tension between Gene and him. But I knew that John's expertise and his 8-inch-diameter Celestron telescope would be valuable in assessing what we saw during the high performance test. As a bonus, we could travel in style in his motorhome.

It was a 150-mile or so trip through some of the most boring desert landscape you can imagine. We'd be setting out in the late afternoon and getting there after dark when there'd be even less to see. Of the assembled group, Gene and John performed as the two ends of the poles between skepticism and belief.

Gene wasn't rabidly anti-UFO belief, but given some of the strangeness between the pair, I gured they'd give each other crap. 劒at would be good for some entertainment. We always seemed to be able to ride John pretty hard when he launched into some out-there discussion about whatever had caught his attention. John was kind of like a magpie, anything shiny and he'd take it and y off with it. Yet, when you asked him a question about his area of expertise, it was like a switch ipped in his brain and he was the most articulate and focused expert.

Sure enough, after John picked up Tracy and me (Tracy liked John since he was the one who real y introduced her to the new love of her life, ying) we headed to Gene's house. When Gene came out to the motorhome, I heard

John snort.

“Where the hel did you get that shirt?” he asked.

I hadn’t paid much attention to what Gene was wearing, but at John’s cutting remark I saw that it was black and purple and looked like massive bruising had spread across my friend’s upper body.

“Your wife got it for me,” Gene snapped back.

It wasn’t exactly a “your momma” joke, but close enough. John put the RV

in gear and we headed out from Gene’s place. 劒e usual conversations about best routes began. Gene was in favor of taking the interstate until we got to Highway 93 to head north. John had to be contrarian, so, after making a few veiled references to President Eisenhower and his real reason for establishing the interstate system in this country, instead of the interstate, he took Power Line Road, until it intersected with the Great Basin Highway.

“How can you be in the middle of nowhere, if you’re nowhere?” Gene asked as we bounced along the irregular pavement.

“劒at’s for greater minds than yours to determine,” John said. “I know this, though. I’ve own over a few different nowheres, and I can tel you that the middle looks a lot like the rest of it.”

Tracy intervened and asked about Gene’s new baby and how he managed to get the night off. His in-laws were stil in town and they looked at him askance when he told them he was going out with friends.

“I heard someone say once that it’s easier to ask for forgiveness than it is for permission,” John chimed in.

We al laughed at that. 劒e conversation was on anything and everything but what we were al about to do and to see. I suspected that the worst thing that could possibly happen was the test ight to be cancel ed for some reason.

飀e weather wouldn’t be an issue, but I knew that there was nothing I could do to control what the powers that be decided.

At one point, the RV began to stagger a bit on a climb.

“Damn it,” John said, and pul ed over to the shoulder.

Eventual y the problem was diagnosed. 飀e transmission was low on uid.

“Cal yourself a pilot? Have you ever heard of a pre- ight check?”

“And to think I let you take my wife up in a plane.”

More good-natured insults and comments were hurled at John. Gene volunteered to hitch hike back to a gas station to get some uid and then hitch a ride back.

When he came back he had a six-pack of beer in one hand and two quarts of automatic transmission uid in the other.

“飀is,” Gene said, hefting the beer, “goes in us.” He then lifted the other containers. “飀ese, go in the transmission. Got it, John?”

“Mind if I use that shirt to wipe off the dipstick, dipstick?” John looked very pleased with his comeback.

“Took you nearly a hundred miles to think of that one didn’t it?” Gene offered, never one to al ow himself to be topped.

Because of our delay, I was glad that we’d al owed enough time to make it to Groom Lake before night fel . 飀e tests were general y conducted shortly after the sun went down. As we bounced along Groom Lake Road—a washboard dirt road at the far end of the site and outside the instal ation’s boundaries—I had to laugh when John turned off the headlights.

“飀is is exactly the right vehicle for a stealth operation, isn’t it?”

John nodded, “飀irty feet of bone- and machinery-rattling stealth at your

service. Guaranteed to alert anyone of your presence within a mile and half."

"Let's just hope we don't have to make a fast getaway," Gene added.

I wasn't sure if he was truly concerned, but I reminded him, and more especial y Tracy, "We're on a public road on public land. No one can tel us that we can't be here. Besides, with John with us, al we have to do is drop his name and his mom's and al wil be forgiven."

Tracy looked at me and I watched a shadow of worry pass across her face before she smiled and squeezed my hand.

Along with some food and beverages, we'd also unpacked John's Celestron telescope, a couple of pairs of binoculars, and a video camera and tripod. We went about the business of setting up the devices. Once the equipment was set up, we stood, shifting nervously from foot to foot and waited. We didn't have to wait very long. Within minutes after settling in, John, who was looking through the telescope shouted, "I got something!"

He pointed into the night sky to our north and east toward Area 51 and S4.

A light had suddenly appeared above the Papoose Mountains. A bright light, at the orange end of the spectrum, began to glow brightly. I stood focusing my attention on the bright object as it appeared approximately forty- ve degrees above the horizon. A few instants later, it appeared at sixty degrees above the horizon. 劻en, seemingly in the time it took for me to blink again, it had climbed again and was then thirty degrees to the right of where I had just been focusing. I heard a commotion behind and a few muttered swear words and exclamations of surprise and delight. I kept my eyes on the lights.

Once again the light moved in what I could only describe as a staircase maneuver. Appearing at one height and the up, over, up, and over.

"劻at's no winged aircraft," John said, his voice rm with conviction. I recognized his authoritative tone mixed with a bit of awe. "No way in hel

anything we produce could make those kinds of maneuvers. Flat out

impossible.”

“Did you see that?” Gene said, nearly shouting. “Zipping along like that and then just stopping. How in the heck can it do that?”

After I’d seen the low performance ight I was certain that the gravity control theory we’d arrived at was correct. Seeing this high performance ight only con rmed it. It’s nearly impossible to convey in words how quickly the light moved from one location to another. I’d seen jets ying overhead in the night sky and I could easily scan their path of travel with my eyes while my head remained stil . Not so with this. Even from that great a distance from the light source, at times the craft’s maneuvers had the light moving out of our xed line of sight. It was astounding and thril ing to see how that reactor and its other components actual y worked in a real-time application. I had an even greater admiration for the engineering behind the emitters. How could they move so quickly to accommodate the kind of movements the craft was making? How could objects as large as they were and made from a material that was somewhere between a metal and a ceramic move so quickly to al ow them to point in the direction that the craft was moving in? 劒ey appeared to be rigid structures, yet they moved with the uidity and exibility of a muscle.

Were they, when under power, somehow transformed into a more supple, more elastic material?

I also wondered about the color of the discharge surrounding the craft.

Why did it appear to be orange, not pumpkin orange but dul er, with more brown mixed in. When I’d seen the low performance test, the corona discharge had been a bluish purple. Now, with the thing in ight and presumably expending more energy it was producing a discharge at the longer end of the wavelength spectrum. Orange wasn’t in the spectra of atomic hydrogen that would produce bright reds like in the aurora. If oxygen molecules were excited, you’d see purples or blues from nitrogen being ionized. Just another piece of the puzzle. I thought of sodium vapor lights, the kind that cast an orange glow and are frequently used to light city streets. Was it possible that the craft was some sort of sodium al oy? Sodium is very

light, it oats on water, and the parts we'd been working with were incredibly light. But sodium is also terribly reactive with moisture. Perhaps it overcame that characteristic somehow.

Maybe this was a big anode, a positively charged electrode by which electrons leave a device. I wished that I had brought the compact spectrograph I owned.

It would have shown the Fraunhofer lines in the light and therefore identify which elements were present.

Because we weren't in line of the direction the emitters were pointing, we couldn't see what form the distortion was taking, how it might have affected our visual sense of the area around the emitters speci cal y and the craft general y. If we had been standing right beneath it, right there at S4, we would have been able to see that and I could compare it to what I'd witnessed during the low performance test.

Eventual y the light descended below the peaks and the test was over. We al stood silently for a minute. 劒e sky l ed with stars and the night air felt chil ed again, crickets chirped and the wind rustled a creosote bush and I smel ed its fragrance. 劒e whole time the test ight had been going on, I'd been aware of very little going on around me, al of my other sensory apparatus shifting power to my eyes.

I heard a voice, as if I was coming up from being submerged in water, I gradual y made sense of those sounds: "Here we are at a super-secret government instal ation in the desert outside of Las Vegas near Groom Lake.

What we've witness rising over the Papoose Mountains con rms what many have long suspected and the government has long denied."

劒e voice was John's. He stood in front of the video camera that he'd mounted on the tripod, and he was sounding very much like a news reporter doing one of those live-from-scene broadcasts. 劒e camera's light cast him in a bluish glow, and just outside that light, I could see Gene standing, stil scanning the sky, his eyes ablaze and his smile a wide gash across his face.

“Amazing,” Gene said. “A-Maz-Zing!” He lightly tapped the side of his temple with the at of his hand and kept his head wobbling for a few seconds.

John was stil narrating his story, and Gene came up to me with his hand out, “ꠇank you. ꠇanks for this, Bob. I can’t tel you what this means to me.

ꠇat you shared this.”

I was glad to have done it, and told Gene just that. ꠇen he went on, “I know that maybe John won’t say this. You know how he can sometimes be. I think I know why you invited him, too. Guy’s spent a lot of time believing in this stuff, catching hel for it sometimes. You let him see what he’s believed in and wanted to see. ꠇat’s a nice thing, you did.”

I had considered John’s situation before, but Gene made me understand things on a deeper level. I could empathize with John. I knew some things and

if events hadn’t unfolded like they had, I might not have ever been able to share what I knew with anyone else. Little did I know just how far the paral els between John’s plight and mine would extend.

I joined John and Gene in loading up the gear. Tracy was stil standing in place, arms wrapped around herself, staring up at the sky.

“You think it helped?” Gene asked me.

“What do you mean?”

He nodded toward Tracy. “Had to be a little weird for the two of you.

Leaving the house on short notice al the time things like that. Seeing is believing.”

Maybe on some subconscious level I had wanted to prove to Tracy that my absences from home were for the reasons I’d told her. ꠇis might have made me a bad husband, but at the time, I real y didn’t have much of a sense that

my work at S4 had put much of a strain on our relationship. I believed she understood what was necessary and believed her when she told me that she trusted me. Stil , it seemed odd to me then, and remains so until today, that Tracy hadn't said a whole lot while watching the demonstration or after. She'd expressed some concern when I rst told her of the plan and what it might mean for me and for us if I violated the security agreements I'd entered into. At least after the high performance test she could better appreciate what was at risk.We had a long drive ahead of us, and we al were early risers, so we quickly got back into the RV for the drive home. I think that we'd al gotten a jolt of adrenaline through our systems, and were paying the price for it afterwards with lethargy.

A few days later, I let Gene know that I was planning to go out to the site again. 劒is time I had invited another friend along. John couldn't make it. I was a little more concerned that time about being watched and tailed, so Gene and I worked out a plan to use a rental car to drive out there. We debated about meeting points and drop-off locations, working ourselves up into a bit of a state for what proved to be no good reason. Stil , better to be safe than sorry.

劒ere was a kind of 劒ree Stooges quality to our planning, as if we mixed up the two CIAs—the Culinary Institute of America and the Central Intel igence Agency. Tracy was going to join us again, and maybe it was the overlay of fear that clung to her that had Gene and me in a bit of a tizzy.

Some of that was due to the one discussion that the participants in the rst trip did have on the way home. My reluctance to write about it is a re ection of what they discussed and my long-standing lack of any real focus on this issue. Gene had remarked that the entire time the ight was going on, I seemed lost in my own little world. 劒at was true. I was fascinated to see the craft in ight and was trying to visualize how the systems I saw were capable of producing that kind of performance.

John reminded me of a remark that he had made at the time (while the craft was stil in the air) and that I didn't even remember him making.

“You were stil just standing there with your tunnel vision goggles on, and I said, ‘At minimum that thing’s got be going 700 mph. 劒en it’s stopping on a dime. 劒en it’s back up to 700 mph again. Can you imagine what that kind of lateral acceleration and deceleration would do the being inside it?’”

“You’re right, I don’t remember you saying that. And you’re right.

Essential y that would be the equivalent of hitting a wal at 700 mph. I don’t know for sure if the human exoskeleton could sustain that kind of velocity, of having the organs sloshing around. I don’t know if they’d come out, but they’d certainly be crushed.”

John raised his nger in the air. “Precisely what I was trying to get you to conclude. A human body couldn’t survive that speed. I’m not talking about the human body keeping its guts intact; I’m talking about there not being a human body in there at al . Some other being had to be piloting that thing, no doubt.”

Gene said, “I don’t know about that for sure, but it did get me thinking. I know that you said, Bob, that there were nine other of that kind of craft out in the hangar. I was just sitting here wondering what those beings’ lives were like.

Did some of them work at the factory or whatever that produced them? Did they go home to mate at the end of the day and be joined by their kids who went to school?”

I considered that for a minute. “I have to confess to you guys. To me that’s the least interesting part of this. I didn’t consider any of that at al while watching the test. 劒e machine was the thing for me from the beginning and it stil is. I don’t know if I believe what I read in those brie ngs. I admit I didn’t read them al , but stil what fascinates me the most is the technology. 劒e rest . . .” I let the words drift along the highway to scatter with the wind.

In the days after witnessing that rst high-performance ight test, I’d been taken up with other ideas than the life of the beings that created those craft and how the craft arrived here. In some ways, that was immaterial. As I’ve said many

times, the al ure for me was the immensity of the power that propulsion system produced. What stymied me was the realization that it produced that power in a nearly reactionless fashion. As near as we could determine, apparently no nuclear reaction was going on—we could detect no change in the identity or characteristics of an atomic nucleus that resulted from it being bombarded with an energetic particle, and there were no ssion or fusion products left over from a reaction. As near as we could determine, no chemical reaction was taking place—we detected no rearrangement of the molecular or ionic structure of a substance that produced a new one with a different chemical identity. No combustion. No decomposition. No synthesis.

We determined that the propulsion system bent light and distorted gravity, but that meant that we were dealing with tougher concepts than the kinds of reactions above. Most people could understand decomposition. 劒ey'd either seen it or smel ed it. But when you were talking about the disruption of gravity, you couldn't visualize or smel a rotting piece of meat. Instead you had to play around with more abstract concepts like time and distance. For most us, those are rm parts of our reality. I look at a clock and see what time it is. I don't think about how that clock is, in a sense, an arti cial construct. We as humans created the concept of time as existing in blocks of twenty-four hours.

It's a good construct, but it is stil arti cial. 劒e same with space and distance. I drove twelve miles to get from my house to my job. But how we broke up that distance into miles is completely arbitrary. 劒at's why there's a metric system and an English system that give you different totals. Same "distance" but different numbers entirely. We've al agreed to use these systems of measurements but in trying to explain how this craft moved, how it bent gravity, you'd also have to understand that our usual, everyday conceptions of time and space and distance weren't going to serve us very wel .

John and Gene had joked about the need for greater minds to solve the question of where is the middle of nowhere. 劒e same was true of coming up with an explanation that real y and truly and accurately described how those craft, and that one craft in particular, moved from one location to the next.

While I spent the next week working, I anticipated that my fel ow “spies” were going to look to me to help them grasp an explanation for what they saw.

For the 29th of March, 1989, the mean temperature was 70 degrees with a low of 57 and a high of 80. 劒ose facts were noted and recorded. We set out to note and record what we believed would be evidence of the craft’s capabilities and existence. Tracy and I took separate cars, Gene picked up the rental car, and we al met at the rendezvous point; Gene and I took more circuitous routes than necessary. Our fourth, a man I’l refer to as Jason, met us along the way just of off Interstate 15. We proceeded as before and set up our viewing area. As happened the rst time, the light from the craft glowed in the distance, did its staircase maneuver and then others. I heard Gene ask, “Did you see that move it just did? It went vroom, whoom!”

“No I didn’t, I said,” I had just set up the video camera, capturing Gene’s words and my response.

A few seconds later Gene said, “Look at how light it’s getting.”

Jason had joined me at the camera and I was stil working on the focus. We exchanged a few words about whether or not we were getting anything on the view screen. Final y, satis ed that the camera was capturing the increasingly bright light, I stepped way and watched with a naked eye.

劒e craft hovered for a bit. I blinked and it had moved closer, the light increasing in intensity. 劒e pattern repeated itself.

“I think it’s coming at us,” Gene said.

“It is, isn’t it?” Jason said. “劒at’s pretty cool.”

By the time they were nished saying those things, the light had grown much larger and much, much closer. We al scrambled behind the trunk of the car, crouching and looking skyward.

Gene looked at me, startled. “What are you doing? You’re never scared! You

sit at home making nitro like it’s pesto!”

I had to think about it for a second. I wasn’t real y frightened. I told him,

“I’m a human being. Instincts kick in. Bright, glowing object in the sky moving my way fast, I go for cover.”

“飏at’s reassuring,” Gene said. I wasn’t sure if he meant that I was human and had natural reactions or something else. I didn’t think any more about it.

“As the power output increases, the intensity of the light increases,” I told them al . 飏e light wasn’t eye-searing, but it was somewhat painful to look at.

We were able to speak in a normal conservational volume since the craft produced no discernible sound. It was stil wel above our position.

“It was like I couldn’t see it move,” Jason said. “One second it was there.

飏e next second it was over there. Almost like a strobe effect or something.”

“Looks like it would be a fun ride,” Gene said, “Just be sure to keep your sphincter closed tight.”

“Only you would say that, Gene,” I told him. And then, cutting him off before he could ask, “No, I don’t know if they have sphincters.”

“Wel , al I can say,” Jason added as he laughed, “Mine is quivering right now.”

“You weren’t completely off track about the strobe effect. As the propulsion system produces more power, that glow is brighter. 飏e gravitational effect also disturbs light, time, and space,” I told Jason.

“Breathtaking,” he said. “Stunning. My face feels frozen from having been smiling for so long.”

By this time the lights had darted back over the mountain, stil above them, before the sky above S4 went dark.

“Worth the drive out here?” Gene asked Jason.

“Hel , yes,” he said.

“I’ve seen it twice now and this time was even better with the kind of y over, or at least y at us view that we got.” Gene paused, “I don’t know, Bob, is it right to use the word y? I mean people cal them ying saucers but how that thing moves doesn’t real y compare.”

“I guess that ‘ y’ is the right word if you think about something being above the ground and moving.”

“How can it possibly do what it did?” Jason asked.

We al stood in a tight semicircle, col apsing tripods and folding chairs. I’d been thinking about this moment for a while, how I might be able to provide a visual for everyone to answer as best I could, or at least provide a visual for the concept. I took a ve dol ar bill out of my wal et and held it up for everyone like a magician about to do a trick.

“So, imagine that this bill is the universe. If I take a pen and put a mark here at the far edge of the bill, that represents a starting point. When we traditional y think of time and space and travel, that dot would move incremental y across the bill from one edge to the other or in some other path.

For the sake of argument, let’s just say it is going to move directly across in a straight line. To do that, to make you be able to see that, I’d have to take my pen and, in essence, make a whole series of dots from one edge to the other. In

other words, I’d draw a line across the bil . 劒at’s how we experience movement as a series of moves, one after another, across a surface.”

“Got it,” someone said.

“Wel , with this craft’s propulsion system capable of gravitational change,

it’s like it folds the bill in a series of moves bringing that far corner where my line eventual y ended, closer and closer to it until it was ‘across’ the span of distance. Only it did it far faster than you or I could make the moves to fold that bill.”

“I see. 劒at makes sense.” Gene said.

Jason nodded.

Tracy nodded as wel .

“劒e thing is, we can al understand that on a certain level. I mean, that’s a rudimentary explanation of it. Astrophysicists and others might have more technical, and, more elegant, even, ways to explain what I just did. But the most important thing about al of this is that here on Earth, we can conceptualize this, but we can’t, or at least to this point, haven’t been able to produce a machine capable of doing what that craft does. We simply haven’t.

Not by a long shot. And that’s what I was being asked to help do.”

“And if we could do what that thing did?” Gene asked.

“We’d be masters of the universe. I hope that we’d use it for good, but we could create unbelievably powerful weapons of mass destruction as wel . We could become destroyers of worlds. It boggles my mind to think of what it would mean to be able to generate that kind of power over gravity.”

“Antigravity?” Jason asked.

“I suppose you could cal it that, but what’s the opposite of gravity? What does that mean?”

“I see your point,” he said, and then added, stating the thought for me, “At some point language just kind of fal s short of al this, doesn’t it?”

“Speaking of fal ing,” Gene said, “I’m about to col apse. Let’s get home.”

AS WAS TRUE AFTER THE FIRST TEST FLIGHT WE ALL SAW, WE

didn’t speak much about what we’d seen on the drive home or in the days after. Part of that was because of the secretive nature of our visits, but mostly it was due to the simple fact that we al had lives and jobs and families to go back to. It was kind of

funny to think of it terms of the capabilities that craft had over space and time, but the world didn’t stop turning because of what we’d witnessed. We just had to keep on moving forward. To that end, I tried again to contact Dennis and never got through, never got a return cal to my messages.

Strange to think that I was part of what seemed to be some unraveling of one of the great mysteries of the world, but I couldn’t get a guy to return a simple phone cal . I suppose that’s what I deserved for choosing to do government work. No force of nature, terrestrial or extraterrestrial, could compete with that kind of stubbornness.

CHAPTER

EIGHT

SOME SAY THAT THE THIRD TIME’S THE CHARM. IN this case that was true, but our case the charm was used to break the spel that had me in thral to the work I’d been doing at Area 51’s S4 site. In the intervening weeks since I’d been last cal ed in to observe the test ights, I’d added to my list of frustrations the nature of how the work I was doing there was being conducted. It had troubled me from the beginning. In science, you should be able to take a linear approach to problem solving. You set up an experiment or your thinking with a clear beginning, middle, and end. You do as much reading as you can, familiarize yourself with the work that others have done, etc. We al learned about the scienti c method in school, and it’s a good model that has stood the test of time, but at S4 and working for whomever it was that I was real y working for in the military and government, I’d been placed in a situation where the linear was out the window, where the scienti c method didn’t consist of a series of de ned steps but was more scattershot. In a way, our approach to the problem of reverse-engineering the propulsion system was like what a diagram of that high performance test ight and the

craft’s appearance would have looked like: rst here, then there, then up, then down. I’d real y had it with every aspect of the job, if I could properly refer to it as a job.

And wouldn’t you know it, just when I’d reached that point, they reached out to me and cal ed me again to let me know that I should report the next day to work again at S4. I’d been so used to the regularity of the woman on the phone’s patter, the it is now X time and you need to report at Y time, and that Y time being just an hour or two from X time, that the next day real y threw me for a loop. Maybe it was an act of passive aggressiveness on my part, but I simply said, “飏anks,” and hung up the phone with no intent whatsoever of going in as instructed. No one had bothered to respond to my messages, not even to say, “We can’t tel you anything now, but we wil be in touch when we have more information for you.” Instead, they answered with silence. I was

going to respond similarly, but with absence. I also wondered why the next day. Had they observed us somehow? 飏e car outside the house and the fol owing was irregular at that point, but then again, maybe they’d changed up their tactics? Who knew. If they had fol owed us, I thought, so what? We were on public land violating no laws; of course, I was violating al of the agreements I’d signed but desperate times cal for desperate measures.

On April 2nd, another Wednesday and the day of the cal to report back, Gene, Tracy, Jason, and Tracy’s sister Kristen joined me on another trip up to Groom Lake. You might think that the novelty had worn off by then, but it hadn’t. When the craft ew towards us that second time, and we’d al ducked behind the car, a new dimension had been added. Who knew what other elements to the high performance test might be added? What additional information could I glean from witnessing the craft in operation. At that point, obviously, I didn’t care about how that knowledge might help me help them, but I wanted to know for myself the answer to the question of how the systems functioned.

We took more precautions on the trip out there. We made frequent stops and diverted from the highway a couple of times and looped around the interchange to see if anyone was fol owing. 飏at bit of trickery added to the

excitement. We talked about a number of things, the subject getting serious only once when Gene mentioned that the oil spil near Valdez, Alaska, was spreading, and residents there on the Gulf of Alaska were up in arms. For my part, I was more interested in an item that appeared revealing that scientists at Brigham Young University had fused heavy forms of hydrogen into helium at room temperature. 劒ey hoped that the process, “piezoelectric fusion,” in which a heavy form of hydrogen is electrical y infused into titanium or pal adium, might lead to a viable power source some day. 劒ey believed that they were stil a long way off from it being a viable source of energy, but given what had happened with the oil spil , more and more concerns about greenhouse gasses being expressed, I was at least hopeful. Obviously, I also thought of it in terms of the propulsion system I’d been working on, how it gave off no real heat during its reactionless operation.

I saw Tracy rol her eyes a bit as she looked at her sister, they both nodded, and said, “Okay, Dad.” I laughed, grateful that their scientist father had instil ed in them a tolerance for that kind of talk.

Eventual y, the sister’s conversation turned to who might want to join them to see the Tom Hanks lm 刋e ’Burbs. I knew that they were teasing us, but the point was clear. Lighten up. 劒ey were both highly intel igent women, but this was an outing, an adventure and not a part of a seminar.

To avoid detection and vary our pattern, we drove down an even more isolated road off of Groom Lake, deeper into the desert on a track that the ranchers used to ferry their cattle. We were careful to stil be on a public road and stil have a good vantage point from which to view the test ight. Our growing anticipation had us al nearly giddy. We joked around with one another, and it was good to leave behind the burden of my decision to end my relationship with Dennis and the rest of the people who had anything to do with S4.

We returned to the theme of our il -preparedness to be spies and to carry out our operation in a manner that even approached stealth.

“And you were the one who gave John so much crap the rst time about not

having enough transmission uid," I said to Gene.

"Yeah, but, he's a pilot," he said again defensively, knowing what was coming next.

"But to not have enough gas in the car to even get us onto the Interstate?"

Jason added, referring to part of our plan to stop shortly after meeting up to see if we were being tailed.

"Al part of the plan. 劒at quick pit stop was designed to suss out the situation."

"What's a suss?"

"Don't you mean 'assess?'"

"Or maybe that you're an ass," Jason said, eliciting an appreciative laugh from the rest of us for his word play. By this time, we had rol ed to a stop and were setting up our viewing area.

Suddenly, we heard a soft thud and then saw a greenish round light rol ing in front of us. A moment later, we al stood there with a deer-in-the-headlights look on our faces as a car parked no more than twenty feet from our position switched on its high-beams. I was at the rear of our formation, mostly hidden.

I ducked down, knowing that of al of us gathered there, I was the one who was in the most vulnerable position if we were to be detained.

"What are you folks doing out here?" I heard someone say.

"Who's asking," Gene said.

"Instal ation security," a different voice replied, "You are on military property. I'm going to have to ask you to leave. If you don't comply, there's Nevada state troopers in the area that I'l radio."

At that point, I decided it was best for me to get out of there. I'd asked Gene

a while ago to keep my gun in his car. I eased the door open, we'd switched off the dome light ahead of time to avoid detection, and eased the gun out of the glove box. Using the cover of the everyone else's voices tel ing the security personnel that we were on public roads and not violating any statutes, I hid out in the bush away from the car.

After a brief protest, our group said that they would do as asked and leave. I watched as the security detail, the two men, got back in their car and waited.

Gene got everyone in his car and within a few seconds, they took off slowly in the opposite direction of the security vehicle. I waited for a bit until the security car began to move away. Once their tail ights began to dim, I scrambled along in the underbrush and soon caught up with Gene and the rest of them and got inside the vehicle.

We al bemoaned our fate and grumbled about not being able to see the test ight, but we also al tacitly understood the precarious position I was in and to a lesser extent, the jeopardy I'd placed them in. We were stil rol ing along slowly, we crested an incline and Gene muttered, "Oh. Shit."

Ahead of us, a pair of headlights stared at us. A few seconds later, its police lights ashed.

"剱is might be funny, except it isn't," Jason said. "Like being back in high school and being hassled for trying to nd a place to drink."

A uniformed officer stood in the middle of the road with a ashlight in one hand. As we neared him, he raised the other hand palm up. We stopped.

"Where are you going?" he asked. I knew something was up when he didn't ask to see license and registration immediately.

"Just saw some lights in the sky from the interstate and came out here to get a better look," Gene said. "We understood this to be public property. No signs for trespassing or anything like that."

剱e officer trained the ashlight al around the inside of the car.

“Shut off your ignition. Stay right here.”

We did as instructed, speculating about what the cop was going to do. We saw him speaking into his radio’s microphone. After a brief conversation he returned to the driver’s side of Gene’s car.

“ere’s ve of you in this vehicle.”

“Yes. at’s right.”

“I got a report from the security guys that they saw four people in a vehicle matching this description. You got an explanation for that?”

Jason spoke up from the back seat, “Wel , it’s dark. ose guys were just security men, you know. ey came up on us and one of them dropped their night vision light. Not exactly the most competent guys in the world.”

Al of us in the car laughed at that insinuation. e police officer didn’t.

“I’m sure they can count. Four when they stopped you. Five now. I’d like to see some identi cation from al of you. Al ve of you, please.”

Each of us handed our driver’s license to Gene who col ected them and handed them over. e policeman looked at each one. en the ri ed through the deck, then walked around the car and used the ashlight to il uminate our faces to make sure that our faces matched the photos. I had gotten into the driver’s side seat and had returned the gun to the glove box. I wasn’t concerned about having it. I’d registered it and was legal y al owed to transport it in a vehicle. I was concerned about what we had in the trunk. It was nothing il egal

—John’s telescope, the spectroscope I’d nal y remembered to bring along, a Geiger counter, and a few other scienti c instruments. Any one of those items would destroy our story about just happening by and seeing lights.

Of course, the police officer asked if he could search the car. is was just after he asked us al to exit the vehicle. We complied with that request, but not

with the search.

“Wel ,” he said, “I have to tel you, this doesn’t look good for you and won’t if you have to appear in court. What that tel s me is that you’ve got something to hide.”

Kristen spoke up. “Officer, you said that this was a voluntary search. Our not granting you that access isn’t evidence of probable cause. I’m fairly conversant with the statues that apply here, so unless you can explain to us why it is that you’ve decided that this is no longer a case of us—”

ꠇe officer held up his hand, “ꠇen I’m going to my car and I’m going to cal a wrecker and have you towed out of here.”

Kristen took a few steps forward, “No. You’re not cal ing a wrecker. You can detain us for up to an hour, but that’s it. You are not searching the car and you are not getting us towed. You have no probable cause. If you insist on doing what you say you’re going to do, then you’re going to have a lot of explaining

to do to a judge, to your superiors, and I don’t think you’re going to like what they have to say.”

ꠇe officer walked away. Tracy smiled animatedly, the rst real genuine expression of pleasure I’d seen in a while. “Way to go, sis. ꠇose law classes of yours are paying off.”

“I may never become a paralegal, but at least I can sound like I know what I’m talking about when dealing with these guys. I can’t believe he thought he’d scare us into letting him search us like that.”

“ꠇanks, Kristen,” I said. We could have stood there al night just saying

‘no’ to him,” I said. In an odd way, being out in the desert, watching the police car’s mars lights il uminate the landscape felt so much stranger to me than if we’d al been watching an alien spacecraft ying around. I’d been bored and unsatis ed with working as a photo processor. Life certainly wasn’t

boring anymore, but I wondered then if it was worth al this stress. 劒ere had to be some middle ground. I remembered my mother using the term, “happy medium,” when I was a kid and tel ing her that maybe an “unhappy large” was more what I was going to be on the lookout for in my life.

Seeing the faces of everyone gathered around me heartened me. None of them were pointing ngers at me and blaming me for possibly getting them into trouble or for wasting their time. 劒ey knew what I’d put at risk in sharing the information I had with them. 劒ey were al doing their best to protect me. Despite the obvious potential complications, it felt good to be there with a group who were al working together.

After about ve minutes spent in his cruiser, the police officer approached us. Checking to be sure he was returning the right licenses to the right individuals, he handed back everyone’s identi cation but mine. He held onto the last one, looked at me, and then said with a tone that I had difficultly deciphering, something between sarcasm and admiration, “I guess they know who you are down there,” he nodded toward the base. He handed me my license, stepped back and said, “You’re al free to go. Drive safe and have a good night.”

We al breathed a sigh of relief and got back into the car. On the ride back, we didn’t talk much at al . Gene asked the question that was on my mind, and I assumed on everyone else’s. “What next?”

“We’l see,” I said. “I’m beyond trying to gure out what’s going to happen next.”

For a few minutes we tried to come up with a plausible explanation for our presence out there. It soon became clear that it was pointless to even try. It was so obvious what was going on that it was a waste of time and mental energy to go through an excuse-making exercise. A lot of thoughts passed through my mind as we headed toward Las Vegas, but I never considered that one of the group I trusted had broken that unspoken bond and said something that might have drawn the security guards’ attention to that area. I was sure of that and little else. I remembered a conversation I had with Dennis after

learning about the scientists and engineers who'd been kil ed while working with the reactor. I would have thought that an incident of that type would make the news. When I asked Dennis why it hadn't, he simply said, "We took care of that."

I had understood before that these men had control over every bit of information. If something was going to happen to me, no one would ever know the truth of how I came to lose my life. Oddly, that didn't trouble my sleep that night, and I woke up feeling more rested than I had in a while.

By sunset the next day, I knew what was next. I answered the phone and Dennis Mariani was on the line.

"I'l be at your home in twenty- ve minutes. We need to meet."

I knew it was useless to make any kind of excuse, so I said, "I'l be here."

When I answered the door to nd Dennis standing on the porch, I was surprised to see that there was no vehicle other than my car in the driveway.

"You're going to be driving," he said while looking at his watch. "Let's go."

After I got through buckling in, I asked him, "Where to?"

"Indian Springs."

劒ough he didn't elaborate, I understood that he meant Indian Springs Air Force Base. It was located just north of Las Vegas. I had thought it was deactivated and that troubled me for a few beats. Why was I going to an abandoned military base alone and at night? It al seemed too sinister, then I remembered seeing some craft taking off from there every now and then.

Maybe there'd be a ful staff on site, people who would be able to account for my presence there.

We drove along in silence, the tension thick. I was trying to stay calm and not let on that I was thinking too much about what was going on, not let him see

that I was on edge.

“Didn’t they once use Indian Springs back in the day to aid nuclear testing?

I thought I read something about sniffer planes being launched from there.”

Dennis grunted an indistinct response.

For the remainder of the hour drive, neither of us spoke. I squirmed in my seat, glancing nervously into the rearview mirror, dreading what was to come.

As we al had at the start of the drive back home after being detained by the police, I frantical y tried to come up with a reason why I’d been out there with my friends and family. Eventual y, I gave up. By the time I saw the rst signs for the base, I was resigned to doing this—al I could do was fal back on the truth.

Once we were through the gates and then into an office, Dennis was joined by two other men, both armed. 劒ey looked like they were part of the security team out at S4. Dennis made it apparent that he was real y pissed off. He sat down in a chair and pul ed it close to mine. With his face inches from mine he said, “When we told you this was a highly classi ed project, how did that get twisted in your mind to think that you could tel your friends about it?”

Something about the way he phrased it and the absurdity of the premise made me smile and chuckle a little bit. I truly thought at rst that Dennis was injecting a note of levity into the situation. I was wrong.

劒e man seated next to me reached for his weapon and said, “劒at’s probably not funny.”

Dennis continued. 劒ough he didn’t raise his voice much, his accusatory tone was sharp, and he seemed as if he was biting off each of the sounds he made. I sat there eyeing a black box on the table in front of me. Was it a microphone—part of some intercom system—or a recording device?

Do you not understand the nature of the agreements you signed?

Are you not aware of the consequences of violating those agreements?

After a few minutes of simply sitting there and essential y being pummeled by the comments and questions, I was asked the most obvious questions, the rst one that seemed to be one Dennis wanted me to answer: What was I doing out there and why was I there with those people?

“I wasn’t sure what you guys were going to do with me. Once you stopped cal ing me in to work in the lab.”

Even before I could nish that second statement, I sensed that this was the wrong tack to take. Each of the men displayed body language that this was not the avenue to go down—arms folded across a chest, a lean back in the chair, a

lean forward and a slow, nearly imperceptible shake of the head, an eyebrow quivering and then lifting.

飆inking quickly on the go, I then smiled and said, “Look. Everybody knows that something to do with experimental aircraft and testing goes on out there. If you live in Vegas, you know that. So, when they heard I had a job out there, they assumed. Al we did was go out there and watch the lights in the sky. I gured that would answer any of the questions they had, al eviate their curiosity. Do a little disinformation. No big deal. No breach of security. I didn’t tel them anything.”

Once I got started talking a kind of mental momentum took over. By the time I was halfway into it, I’d almost convinced myself that what I was saying was true. At the same time, I wondered about my assumption that these guys were part of the security group. Would they have been al owed to hear what Dennis was talking about with me?

“Don’t you understand that this project is far more important than any one single person?” Dennis asked. “More important than your life. More important than mine.”

“Like I said, they knew that things were going on with aircraft,” then, uncertain of what the other two men and careful not to say anything about the alien nature of the propulsion system and craft, I added, “瓣ese were lay people. 瓣e general public. 瓣ey wouldn’t have been able to gure out anything but what I told them. And I told them nothing.”

“Nothing?” Dennis jumped on that word immediately.

“Essential y nothing. Just that there were ights-—”

“What do mean ‘essential y nothing?’” 瓣e guy to my left said.

“If you let me nish—”

“I think you’re nished,” he said.

Dennis intervened, “And just what is it that you think we’re going to do with you and your friends.”

“Nothing with them. I gured I would go back to work on the project.”

“You smiling again? You think this is funny? Don’t you understand how serious this is?” 瓣e interrupter was at it again. Dennis sat back as if to get a better view of the show.

I wasn’t aware that I had been smiling. Maybe under the stress of the situation I had. I knew that I had to ght the urge to say that I understood the gravity of the situation.

“瓣is isn’t funny. 瓣is is no joke,” the Interrupter went on. “Wel , maybe Mr. Lazar doesn’t understand what the rules are around here.”

“瓣ey didn’t see anything. A few lights in the sky. Oh, what a big deal. A few lights in the sky.”

瓣e interrupter must not have like my tone, he nudged the gun against me, and I lost my composure for a bit, “瓣is is ridiculous. It’s not like I told them that what they were seeing was aliens ying around in their saucers. 瓣is is—”

I stopped myself. Dennis looked like I had kicked him in the bal s. He recovered quickly and said to the Interrupter, “Please leave the room.”

Once the man left, Dennis switched off the device on the desk. He tore a sheet off the legal pad that had been sitting there, presumably the whole time though it hadn’t registered with me until then, I was so shaken.

“Write down their names and their contact information.”

I hated the idea of having to do that. It was one thing for the police to have gotten it from their driver’s licenses, but this was far more Judas-like an action.

I felt my throat tighten, “飆ey have that information already.”

“I want you to write it,” Dennis said, his voice reaching a level of menace that I hadn’t heard before. I knew then that this writing had some kind of signi cance beyond the simple gathering of information. My writing those names and gures down would be an act of betrayal, a demonstration that I was capable of violating any kind of trust.

“I don’t know al that information. I don’t have people’s addresses and phone numbers committed to memory.” Dennis continued to glare at me.

“Look, I’l admit it. I’m scared. I can’t think straight right now.”

Dennis tapped the sheet of paper, “Write it. Now.”

“I’m tel ing you,” I began, my voice sounding even to me like the bleating of a sheep. I stopped and looked at the third who was in the room. 飆e entire time he hadn’t spoken and he had displayed none of the gestures of disapproval or dismay that the others had and that I’d mental y catalogued earlier. He simply stared ahead impassively. Our eyes met and he continued to regard me as if I was no consequence to him whatsoever. 飆at indicated to me that he was the one I should be most concerned about, he was the one most capable of doing me harm.

I was in such a quandary. ﬀey would know if I was giving them false information. ﬀat would lead them to believe that I had something to hide, that I was capable of other kinds of duplicity, that I had no regard for what

they demanded of me, that I was loyal only to myself. If I didn’t, I had something to hide, that I’d already committed some acts of duplicity, that I had no regard for what they demanded of me, that I was loyal to someone else.

ﬀe last was true if I gave them the ful information they asked for. Seeing no other way around it, I gave them some information, substituted Gene’s office number for his home number, left many things blank and gave them an empty promise that I would get them what they needed.

I could neither be the stand-up guy who openly de ed them or the man who was wil ing to lie down and be run over by their threats. Instead, I sat there in that middle ground, nding nothing to be happy about and wondering if the man’s indifference was somehow a re ection of how I truly felt about myself. Was I too indifferent even to feel self-loathing?

“Next, I want you to tel us who you’re working for,” Dennis said, his lips pursing as he scanned the paper I’d returned to him.

“For you. For whoever you work for. For EG&G. I don’t know. Naval Intel igence was on the check, so I guess them.”

“You know that’s not what I mean. I know that you wanted to sabotage the project. ﬀat’s clear.”

“No,” I said recoiling in my chair. “ﬀat’s not true at al . Not one bit of it.”

ﬀis went on for a while until Dennis looked at his watch.

“We’re done here. For now. Go back home. Wait for my cal . We’l probably have you come back in.”

His last statement was ambiguous—to work or to be further interrogated? I

didn’t dare ask.

I stood up, and as I did, the Interrogator came back in the room. He handed Dennis a stack of papers.

Dennis’s eyes lit up. “ 劒at’s right. 劒at’s right. I almost forgot.” He looked at the papers for a few moments. “Sit down. Sit down.” He waved the papers at me and they uttered brie y before coming to rest.

“You do know you’re wife’s having an affair,” Dennis stated atly.

I sat there not wil ing to take the bait.

“Been going on for a while. Her ight instructor, a guy name Tony. Started back in February. A Valentine’s Day thing, I guess.”

“Why are you doing this?” I asked. “You could make anything up.”

“Even these?” he said, holding up the papers. “ 劒ese are the transcripts to every cal between them. Funny how nearly al of them took place when you

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weren’t around. Seemed like your schedule was ideal for them to meet up.”

I tried to tel myself that what I’d said to Dennis was true: they could make anything up. But something deep in my gut told me that wasn’t the case. I sat there feeling scooped out, like someone had taken a melon bal er and eviscerated me from neck to nuts. When I told Dennis that I didn’t want to see the transcripts, my voice sounded tinny, as if it was echoing inside that hol ow space inside me. He slid them over anyway.

I sat for a few seconds not looking at them. In that brief span, I knew that the empty space inside me was al of the denial I’d kept stored in there leaching away. I’d noticed that Tracy had been distracted and distant. I’d noticed that it seemed like every time I left the house, Tracy did too. At one point early on in my time at S4, Jason had come over to the house. We were going to test some new rocket motors for the reworks display we put on. We left in my

car, and I wasn’t sure if I had al the motors, couldn’t remember if I’d left a box on a shelf in the garage. Rather than go al the way out into the desert and then discover they weren’t there, I pul ed over and got out of the car to check what was in the hatch. Everything was there. I climbed back in and checked the wing mirror before I pul ed out. 劒ere was Tracy’s car. She had to have seen me, but she just drove right past. I dismissed it then, but after that noted but tried not to focus on the dozens of other similar things that happened—phone cal s ending abruptly, her changing plans at the last minute. I stopped myself from thinking anymore about them.

I wanted to look, but I didn’t. I decided that I didn’t need to look through a catalog of my despair and devastation selecting which item to punish myself with to suit my mood at the time.

“Wel , thanks, Dennis,” I said as I slid the papers back to him.

“No, keep them,” he said, sounding more jovial than I’d ever heard him before. “Least we can do.”

“Yeah,” I said, channeling Gene at that moment. “Your tax dol ars at work.”

TO SAY I WALKED OUT THERE FEELING COMPLETELY DEVAStated would be an understatement. Tracy’s betrayal gutted me. I didn’t want to linger on the Indian Springs site, thinking that there were likely to be surveil ance cameras. I imagined Dennis sitting there and laughing at me, a deep satisfaction

animating his face, if he saw me showing any signs of the anguish I was feeling.

I drove away, and on the way home, my sorrow and disil usionment weighed heavily on me. I felt as if I was back in the Puritan days, and someone had attached stones to my body and submersed me in water. I had no energy to struggle against those forces dragging me down. Tracy had once rescued me from the despair that I experienced fol owing my rst wife’s death, had given me hope that life could be good again. Now that hope had diminished. As the days went on after Dennis’s revelation, I became resigned. I truly didn’t care

whether I lived or died.

In addition to feeling betrayed and the sickening thoughts of her having a sexual relationship with another man and how clichéd the whole thing was—

with a co-worker, with a man whose contact I'd encouraged and helped pay for, a ight instructor—I came to another gut-wrenching conclusion. One of the reasons why my security clearance was being delayed was due to Tracy's affair. Whoever was administrating the project and was in charge of evaluating my suitability for the security clearance knew this. A man whose wife is cheating on him is likely to nd out about her in delity at some point. He's likely to be emotional y unstable as a result. As a result, he wasn't the best candidate to be entrusted with the kinds of information that I was going to be, and had been, privy to. Not only had Tracy's affair destroyed me emotional y, it had severely damaged my chances of doing what I considered some of the most meaningful work I might ever do. As frustrated as I was with the processes in place at S4, the eventual product of our work could have proved to be life-altering for me and for mil ions of others. Just because I had sabotaged any chance I had of working there didn't mean that I wouldn't have liked to have continued to do the work. Complicated and con icted seemed to be the buzz words for everything I experienced at S4.

As I neared our neighborhood, I remembered something else that Dennis had said. Maybe I could reapply in six to nine months. I don't know if he was simply throwing me crumbs or a lifeline. At the time, I envisioned that in the weeks and months to come I might have to rely on either of those two to help sustain me and keep me moving forward. I came home from the "visit" with Dennis to an empty house, and in a way that was ne with me. After everything else that had gone on, I didn't know if I had the energy to confront Tracy immediately with that I'd learned. I knew that I wanted to be on my game, so to speak, but this was anything but a game.

I sat in an easy chair in the living room with a drink I'd made, hoping I could be distracted by something mindless on the television. When that didn't work, I prowled around in my home "lab." I'd recently bought some electronics equipment I'd had my eye on for a while and I distractedly read

through the manuals while sipping a second drink. ﬀough alcohol should have numbed some of the pain I was feeling, it didn't. It eased my nerves a bit and after a while what was going on with Dennis receded, but the Tracy betrayal came rushing in. Simply put, I was pissed off. We'd meant a lot to each other and she'd been there for me during one of the darkest moments in my life. I didn't deserve this. Nothing I'd ever done or said could justify the pain she was in icting on me. I would never do anything like that to her. If I thought that things weren't right between us, I would have said something, tried to work it out, and if that failed, we would go our separate ways. ﬀat would hurt, but nothing compared to this. I must have drifted off. I went upstairs to bed and Tracy was already there, sound asleep.

I got out of bed rst the next morning and brewed a pot of coffee. Tracy came down while I was nishing the rst cup. She l ed her own and then mine. She sat down and looked at me, widened her eyes in expectation. I didn't say anything. She frowned and said sarcastical y, "Good morning."

"No it isn't," I said. "Not by a longshot."

"What's going on? What happened?"

I told her what I knew and how I'd found out. She sat there looking at me, her expression steeling itself as she ddled with a spoon.

"I don't know what to say," she said after I'd concluded. She shifted in her chair and brought one leg up underneath, turning away from me slightly.

"How about I'm sorry. I'm treating you like shit and I'm sorry?"

"I'm not treating you like shit. ﬀings happen. I wasn't trying to—"

I immediately cut her off. "Don't even . . ."

"What?"

"Say that you weren't trying to hurt me. How did you expect me to feel?

I’ve been doing nothing but trying to do the best for you. Busting my ass to make a life for us, make things as easy as possible for you.”

“Running around at al hours of the night? Leaving me here al the time.

What did you expect?”

飓at real y got to me. “What did I expect?” I was nearly shouting at this point. “I expected you to understand that I was working on a highly sensitive

project. I expected you to understand that the hours were strange. I didn’t expect you to start fucking your ight instructor as thanks for me taking on a second job and trying to better things for us.”

“It isn’t just the sex.”

“I don’t want to hear that. I needed you, especial y with everything else going on.”

“Wel , if you would have listened to me then maybe al this Dennis shit wouldn’t be hitting the fan. I told you that you were playing with re, but you love that. You love taking risks and ying in the face of authority.”

I pounded my hand on the table. 飓e utensil jumped and a tiny pool of cream shuddered. “Don’t turn this around on me. I’m not the one who did anything wrong.”

“I’m not turning this around. I’m saying that things are real y complicated right now. I heard what you told me about Dennis hauling your ass in. I knew this was going to turn out bad. I knew it.”

“Now’s not the time.”

“飓e hel it isn’t? Yeah, we have to talk about marriage. We’l do that. But for now, don’t you think we’ve got a few more pressing items on our agenda to deal with?”

ffle phone rang.

I locked eyes with Tracy and laughed rueful y. “ffis is how fucked up things are. I’m wondering about the lesser of two evils. Is that your boyfriend cal ing and wondering where you are or it’s that Dennis luring me out somewhere so he can nish this whole thing off?”

Tracy and I went around and around for a while until neither of us was sure who was the monkey and who was the weasel and who was chasing whom. We at last agreed to table for the rest of the day any discussions about next steps—

her cal ing it off, us cal ing it quits. Let things settle down. Let me focus on what I needed to do. After the reminder she made that I’d put us in jeopardy, that I’d, as she put it, “potential y screwed the pooch professional y at the very least,” I seethed. Two wrongs don’t make a right. In my mind, they raise the number of wrongs to another power, keep raising the number of sins of omission and commission until you can’t see the forest for the trees, or the clichés.

A FEW DAYS PASSED WITHOUT INCIDENT. I GOT BACK INTO the regular routine of picking up rol s of lm, processing them, and delivering the nished pictures.

Wayne and his wife were stil not certain if the business was right for them.

ffiat was ne with me. Now that it looked as if the S4 work was truly over, I needed some income. Having the familiar rhythms of work also soothed my admittedly raw nerves. ffie work also gave me an excuse to get out of the house, both to be away from Tracy and to al ow me to meet face-to-face with Gene, John, and Jason, each separately. I told them about the meeting I’d had with Dennis. Our conversations were brief. We commiserated for a while. I told them that I had things under control. It was worrisome, of course, but I thought that having gone out there with each of them had provided me with a kind of insurance policy. Grateful y, they were each okay with that, and didn’t feel I’d betrayed them or put them in jeopardy. John’s opinion held a little more weight with me because of the kind of work he sometimes did for

the government and the people he knew in the CIA. He suggested that I get the hel out of there right away. He'd asked if the surveil ance teams were back, and I told him that they were.

"You can hunker down here in the bunker if you need to. In fact you should." He unlocked one of the gun cabinets in his study to show me a part of his col ection, unnecessary since I already knew about them. "ffey'd be fools to try to come storming in here. A. It would be real y hard for them to get in here, and B. It would be too high pro le of a scene. ffat's not how they like to operate."

I thanked him and told him I'd consider it. And in fact, I did stay there for a few nights over the next couple of weeks. With me barely noticing it, we turned the page on April and moved into May.

I stil had in mind the fact that Dennis was going to cal me, and he'd instructed me to be around for that. At that stage, I didn't want to piss him off any more than I already had. By the start of the second week of May, nearly a month after the meeting with Dennis, I was driving back from a photo drop-off at Gene's office. I was on the east side of Las Vegas on Eastern Avenue, heading for home via Charleston Boulevard and then the freeway. A half-mile or so from the on-ramp, I noticed a car coming up from behind, closing somewhat quickly. I was driving the sports car that I'd taken out to Indian Springs, the 280-Z. Maybe it was a remnant of my jet-car days and being around people at drag strips, but my rst assumption, con rmed when the car

didn't overtake me but pul ed alongside, was that this was someone looking for a race or otherwise messing around. Instinct took over, and I accelerated thinking I'd beat them to the on-ramp. I cut in front of them and they pul ed alongside again. A quick sidelong glance al owed me to see two head shapes, nothing more distinct than that, in the car's front seat. We did this catch up, speed up thing one more time before we got to the on-ramp. I had to slow at that point, in order to make the turn. I was ahead of them and gured that was that.It wasn't.

ffe on-ramp was a single lane, and the other car drove with two wheels on

the shoulder and two in the dirt and grass alongside it. Adrenaline shot through me, as much because I wondered if I was going to witness a crash, and also from fear of who these guys were and what they might try to do to me. A shot rang out, and I felt the rear of my car slewing sideways. Instinctively, I turned the wheel hard left to correct and that took me off the ramp and into the grass. I came to a stop. I was paralyzed with fear at that moment. I sat with my arms, elbows locked, head pointed straight ahead, just waiting, certain that someone was going to come up to the window and re another shot at me. I don't know how long I sat in that position, but by the time I looked around, al the dust had settled, the other car was nowhere in sight.

I eased the driver's side door open and got out. Traffic thumped by on the Boulevard and I could hear the faint whish and whoosh of interstate traffic in the distance, keeping time with thumps was my thudding heart. I walked around the back of the car and saw that my passenger side rear tire was at and that a round hole was visible in the sidewal . I probed the opening with my nger, felt the strands of rubber and above that, nearer the tread, the steel belts. I determined that the tire stil had enough structural integrity to support the car. I was no more than ve miles or so from home. Al I wanted to do was get out there and get to a safe place. By this time, the sun had gone down completely and it was ful on dark, so I put on my emergency ashers. I made it onto the expressway and, doing no more than twenty to thirty miles an hour in the right lane made for home. I was grateful that a utility company truck pul ed in behind me. 劒e driver must have noticed the tire and my distress. He put on the ashing lights on the roof of his vehicle as wel as his hazard lights.

Al of that ashing drew a lot of attention and reminded me a bit of the scene in the desert, but I was glad for the escort to my exit.

As I drove along, the reality of what had happened started to set in. I'd red weapons often enough to know that it's hard to hit a target from a standstil .

To be able to re from a moving car into another moving car and hit a tire was either a stroke of luck—good luck for me that they hadn't hit the gas tank or

me, and bad luck for them if either of those two options had been their intent.

And bad luck for me if these guys had been aiming for that target and had succeeded in hitting it. 劒ose guys would have had to be pros. Maybe al they wanted to do was warn me. If so, the message was received. I got another bit of a fright when I pul ed off the expressway. 劒e utility truck fol owed me off the ramp and al the way home. I brie y considered not going home and trying to lose them. I told myself to just calm down, and proceeded to James Lovel .

When I signaled to enter my driveway, the truck ashed its bright lights in recognition and went on its way. I breathed another sigh of relief and gratitude.

I slumped at the wheel for a few seconds, my forehead resting on it. When I looked up, I noticed that there was another car, one unfamiliar to me, parked alongside me. Startled, I wondered if it was best to just remain inside or try to run for it. A few seconds later, a woman in a dark suit tight-walked over to me, waving an envelope in her hand. What was this? A processes server notifying me that I was being sued for divorce? A female assassin? Publisher's Clearinghouse coming to inform me that I was a lucky winner?

It turned out to be none of those. As she got closer, I recognized her as Joyce, another real estate appraiser. I was supposed to have stopped by her office after Gene's. In al the commotion I'd completely forgotten. I got out of the car and stepped into a cloud of perfume.

"Bob, I hope you don't mind. I live nearby and I was on my way to dinner.

A date, actual y, nice place off the strip, rst time going there, so excited."

"It's okay Joyce. I owe you an apology."

"It's ne, Bob. Just ne. Just that I'l need these tomorrow. You know how it is, Bob."

I'd begun to wonder if she was going to Bob me to death.

“Sure, I do.” I went to lean against the car, casual y but feeling a bit lightheaded after the rush. I staggered a little given the car’s leaning lopsidedness.

She looked at me, then down at her feet and then at me again, appraising.

“Bob, your car looks a little funny. Or is your driveway sagging? I’d get that

taken care of. Professional opinion, of course, Bob.”

“No. Driveway’s ne. Just that someone shot my tire out a little earlier.”

“Oh, wel . Only in Vegas,” she handed the envelope with the lm rol in it.

“I real y, real y need these rst thing in the morning, Bob.”

I nodded. “Enjoy your evening, Joyce,” I said, realizing that I was seriously outgunned in the name game.

As she drove away, I marveled at how she had acted, as if someone getting the tire of a car shot out while driving was just a normal part of the daily commute. But it wasn’t. I was completely unnerved.

After the brief mini-absurdity with Joyce, I returned to the other absurdity in my life. Despite Joyce’s assessment that these kinds of things happen in Vegas, they didn’t. I could have encountered some random act of violence, but in my gut I sensed something more sinister lurking beneath the surface of a coincidence gone bad. Dennis had said they would be in touch. Was this the form that re-establishing of communication was going to take?

Given the circumstances, I abandoned my no-phone-cal s rule. I immediately got in touch with Gene and John. John was emphatic. I had to get over to his place immediately. It was the safest location for me, and thought that together we could formulate a plan of action. I decided it was best to do as John instructed. Gene had been in favor al along of me getting away from the house, and potential y out of Las Vegas. In the weeks since I’d met with Dennis, the observers had been a constant presence, though they had stopped

tailing me. By the time I'd arrived, it seemed as if John had already formulated the start of a plan.

"You protected yourself by tel ing us about what you were doing, right?"

"Yes."

"And that worked didn't it?"

"Wel , John, I don't know about worked."

"You're stil above ground aren't you? Stil breathing?"

"ꬽat's true."

"So what I think is, is stick with the formula. Except you tweak it a little bit. Go wider with the information."

"How do I do that? Stand on a street corner like some loon with a days until doomsday sign?"

"ꬽat would work, but you're sign painting skil s probably aren't up to snuff. I've seen your handwriting."

"I think you're right about going wider. I was thinking of that myself."

"Mind if I cal George Knapp? Get him over here? I trust him."

"Fine."

George Knapp was a reporter for the local ABC affiliate in Las Vegas. He covered the usual stuff, but also did some investigative journalism into political corruption and the like. He also was one of the rst journalists in the city to real y poke around and into Area 51. He'd interviewed John before, and if John liked him and trusted him, even considering John's lack of a lter, that was good enough for me.

John got me a drink and escorted me into his office. I was joined later by

George and his boss, the station’s manager Bob Stoval . It seemed a bit strange to be face-to-face with a man who was in my living room a lot of nights.

George had a straight-forward demeanor and a candor that put me at ease.

John, on the other hand, didn’t. He was looking out for my best interests, but he immediately took the lead in speaking with the two TV guys. He was acting as if he was my attorney, not as if he was asking for a favor, essential y. He started out by making demands, tel ing them I’d go on camera, wouldn’t reveal my name, and I would only answer yes or no questions. 劒at last bit got to me.“It’s not like I’m on trial, John. You don’t have to worry about me saying too much and possibly incriminating myself.” I can’t believe, now, how naïve I was to believe that I wasn’t going to be put on trial, not in the legal sense but in the court of public opinion. I shared more of my story with George and Bob, and eventual y we came to an agreement. We’d do a piece that they would broadcast the fol owing day. I wouldn’t use my own name, they would only show me in silhouette to protect my identity, and I would give them responses that went beyond simple yes or no replies. I was concerned about the guys watching my house, so they left it up to me to give them the location, and they would send a truck over. I’d think about it overnight and see who would be wil ing to have this al go on. We chatted for a while longer then shook hands.

John and I sat up long into the night speculating about how my coming forward on television would be received by Dennis and the powers that be. We knew I would be stirring up a shit storm in the desert, but kicking the sand up in someone’s face was better than having my tires shot out from underneath me. Maybe it was the product of such a long day, but it took me a while to

realize that a shit storm and a sand storm weren’t quite the same thing, but John must have understood, except for one thing: he’d dozed off.

I made my way to the guest bedroom and gured that a shower would help ease some of the tension from my body. I stood under the spray with my eyes

shut, the sound of the water on my skul a soothing and sibilant tone. I wondered if I was doing the right thing, half-marveled and half-bemoaned the fact that it had al come down to this. I wasn't prone to the "if only's" but as the room l ed with steam and I could nal y feel some weariness overtaking me, I wondered what it would have been like if I had been content to remain Bob the Photo Guy. And later, as I drifted off to sleep, I wondered after tomorrow who I would be known as. One thing was for certain; I wasn't going to be Bob the _____.

CHAPTER

NINE

THERE ARE TIMES WHEN YOU JUST HAVE TO TRUST your gut instinct. 劒ere are times when you have to trust other people. When the two of those are working in concert, then there's a pretty good chance that you're heading in the right direction. 劒ough I didn't know George Knapp at al before I met him, I trusted that he believed in my story and he believed that it needed to be made available for wider consumption. I'd gone back and forth on the issue of the public's right to know about the presence of these craft and our government and military's involvement with them. I wasn't, strictly speaking, antiauthoritarian. I didn't rebel against people in positions of power just because they were in power. What general y got me a bit riled up was when authorities injudiciously wielded power or didn't account for the fact that not everyone was incapable of behaving rational y. Again, that's going back to the idea of a widespread panic or serious social disruption resulting from revelations that there were other life forms in the universe and we'd had contact with them. I'm not sure I bought into that idea completely. I also understood that whoever was able to decrypt how this astounding technology worked needed, as the phrase goes, to use their powers for good and not evil.

And if no one but a select few knew we had that power, then they would have greater rein to do with it what they wanted and without impunity. 劒at was not good.

But as I woke up in John's house and thought more and more about what I'd

committed to—the on-camera interview—my decision was based more on self-preservation than altruism. 劒e blend wasn't so highly concentrated with self-interest than it had been, but it was stil predominant. I wasn't trying to be a hero; I was simply trying to stil be, to continue to exist.

In the passage of time, I can recount these events in a much more reasonable, much more logical fashion. At the time, I was in state of panic, wondering if my decision to go wide was going to fan the smoldering embers

into a re or throw enough water on them to douse them completely. I knew that I had the ful support of George, Gene, and John. 劒at was helpful, but in the end, only one person should be responsible for decisions like these—the one whose life is most immediately going to be affected.

To say that I discussed my decision with Tracy would be a gross overstatement. I informed her of what I was going to do, but I didn't ask for permission nor did I consult with her about how I should conduct myself. To her credit, she and her sister both decided to accompany me on the "set" of the interview. I realize that using the word "set," as in a movie "set" implies some kind of ctional aspect of what was going on, but we did stage the interview at my request. I mention this only because of how the day proceeded. I had agreed to appear in silhouette and so the camera operator who accompanied George, the sound guy, and George himself al had to gure out how to achieve the visual effects they wanted to make it look interesting and to abide by my request that my identity be protected.

Because, as Gene kept reminding me, John Lear's house was a kind of secure compound, we chose to do the interview at his place. I don't care who you are or where you live or what kind of relationship you have with your neighbors, if you drive along in a remote coverage TV news van, with its cal letters and insignia emblazoned al over it into someone's driveway, you're going to draw a crowd of onlookers, even if the van disappears from view.

Most of the time when I'd gone to visit John, I'd parked in his driveway. It wasn't possible to be seen from the street, so it was unlikely that anyone would be able to identify me when I came out of the house and got positioned

to speak with George.

For that reason, on May 14, 1989, my supporters and I stood around waiting while the technicians did their thing. George had briefed me very general y about the kinds of questions he was going to ask, and I had to appear on camera for a couple of test shoots to make sure that I was framed properly and the lighting worked out. I couldn't resist one more poke at those in charge of the program, and I instructed George to refer to me by my chosen pseudonym—Dennis. I'm not sure if that quali es as gal ows humor, but I did have a smal sense of what it might be like to be facing a moment so heavily freighted with consequences. I chose to look at the interview as an example of one of the most widely known principles of physics: Newton's rst and second laws of motion. I could stil act on what I'd set into motion, and even up until

the last moment, when I was standing on my mark and George stood off camera and signaled me that it was a go, I stil wasn't certain if I'd let any words come out of my mouth.

I did, and I found that the release of one was easily fol owed by another and then more and more. We talked for perhaps ve minutes. I gave George the basics. 劒e interview was more about the existence of the craft, my role at S4

general y, and involved no critique of the program, no mention of why it was, or how it was, that I had become embroiled in a dispute with my now former employees. When it was aired, we al gathered to watch it at John's house. 劒e interview was paired down to just a couple of minutes at most. It hit al the high points, and I got a big kick out of seeing the name "Dennis" appear on screen beneath my shadowy image. I was glad that George had kept in the part about me stating that I believed the technology needed to be kept classi ed.

劒e fact that we obtained the technology from an extraterrestrial civilization should be public knowledge. I'd nal y settle on that as my stance, believed it at that moment, and continued to believe it ever since.

I had no idea how the piece was going to be received. I felt some relief that,

again to revert to the Newton metaphor, I'd set an object in motion. 劒at would at least govern, to some degree, what they did next and what I did next.

Like I said, I've always been a lover of big reactions and explosions and that sort of thing. Being inert and observing things that are inert is, for the most part, tedious. I wanted to see how al of this was going to be resolved and I hoped that it would be so sooner rather than later. Either let me go back to my

"old" life, or at least let me deal with the new one.

After the broadcast was over, I returned to my home on James Lovel . I didn't feel like I was in exile from my shattered marriage or my possibly ruined career as a scientist. As I saw it, I'd done nothing wrong, and shouldn't walk around feeling like a leper or a pariah. 劒at feeling didn't last very long.

劒e phone rang, and I picked up. "Bob, do you have any idea what we're going to do to you now?"

"No."

It was Dennis. He didn't say anything else, and in a second or two, the connection terminated.

So much for any kind of certainty. So much for the laws of physics somehow applying here. So much for feeling safe and secure in my home.

Without a word to Tracy, I slipped out the door and returned to John's house where I spent the night. I lay in the dark and thought about al the ways that this should matter but concluded as the rst gray light of morning came through the windows that living or dying was seldom a question of choice. It was often governed by forces inside and outside of ourselves, but I was too tired and too distraught by al that had gone on to real y care which outcome was produced. As before, I also gave some thought to eeing, but knowing who I was dealing with and powers they likely possessed, running away seemed fruitless. 劒ey'd be able to track me down if they wanted to. At least in Las Vegas, I had my core group of friends who had my best interest at

heart.

꠸ough I woke up the next morning and initial y felt like I wanted to just sleep the rest of the day and many others away, duty cal ed. Despite being freaked out the previous night by Dennis's cal , I had remembered to grab a packet of photos that Gene needed. I set out early for his office. I stopped at a café for a quick bite to eat, and sat there nervously looking around the room for any signs of suspicious activity. I stopped doing that pretty quickly when I realized that I didn't have a rm grasp of what might constitute suspicious activity. I nished up and left, scanning the newspapers in the box outside the café. Nothing on the front page indicated that my story had been important enough to be above the fold and maybe not even anywhere in the paper. I chided myself for thinking I was such a big deal and headed over to Gene's office.

I walked in and another man was with him.

"Bob," Gene said. "꠸is is Gene."

"How you doing?" the man said. "I'm an appraiser too. Weird isn't it? Gene.

Gene. Like you stepped into another universe."

In fact the man looked nothing at al like Gene, his olive complexion and thinning black hair splayed across his pate in dark isosceles clumps.

"I know, how about this? Gene, Gene the dancing machine. Remember that show with Chuck Barris? ꠸e Gong Show?" ꠸e man said.

"Sorry. I don't."

Gene #2 narrowed his gaze and cocked his head. "Hey, this guy," he said, directing his remarks to Gene, "Sounds like the guy I saw on the news last night."

"No. I don't know. I saw it, but I don't hear the similarity. He's just the Photo Guy."

I shrugged and said, “Just the Photo Guy.”

When we were alone, I said to Gene, “ꟻat’s a bit scary. I thought about them using a voice disguiser but didn’t think it was necessary. Now this?”

Gene tried to reassure me that it was a uke, and he was eventual y proved right. Over the course of the next few days and into June, no one else claimed that I sounded like the Alien Guy on TV. In the years to come, I’d learn that the brief bit of footage that aired that night eventual y made its way to various locations around the globe. I thought I had some sense of the power of the media and mass communications back then, but didn’t realize what a greater force it would become and how it would directly impact my life.

My friends took on a more low-tech campaign on my behalf. Gene and a few others, suspecting that his phone line was now being tapped as wel , started to talk more openly over the phone about what I’d been doing. He cal ed friends and family, enlarging the circle of those in the “know.” ꟻe idea was simple. If Dennis and others decided that I was such a security risk that I needed to be kil ed, and more people knew what it was that I was doing, having those individuals with that knowledge could either act as a deterrent or increase the number of people would know the truth of why I had been kil ed.

ꟻe fact that I was eliminated, we believed, would con rm the truth of what I had revealed. In their conversations with others, my inner circle also stated that they had written letters to members of various agencies with the government, etc. ꟻose communications—the letters—would be far more difficult to track and interfere with. We felt, that simply giving the appearance of having communicated more widely was enough to keep those who might want to do me harm at bay. We were going to keep them guessing as to who knew what, and created our own kind of disinformation campaign.

I was stil being fol owed and monitored, and Gene reported to me that he believed he had been tailed as wel . I can’t con rm this, and neither could Gene, but it certainly was within the realm of possibility. ꟻe kinds of gamesmanship that was going on was never fun or thril ing. It was always frightening and aggravating. I don’t know if Dennis felt the same way, but

eventual y, on the third Saturday in June, the 17th, after having been contacted by Dennis that a “personal level” meeting was needed, we set a time and place for a face-to-face meeting. At my suggestion, we were to meet at eight in the evening at the Union Plaza casino in downtown Las Vegas. 劒e more public the location, the better, and a Las Vegas casino on a Saturday night was sure to

be crowded. As it happened, a friend and former col eague from Los Alamos, Joe Vaninetti, was in town. He knew what was going on general y with me.

Gene and I brought him up to speed on the most recent events, and Joe helped us with our planning for the meeting with Dennis.

I wasn’t about to go there alone. I also wasn’t about to expose my friends to any more jeopardy than necessary. I didn’t think that Dennis or whoever might have been with him or at whose urging the meeting was set up, intended to do me harm at the casino. But, as a scientist, you know that you should never jump to any conclusions. We devised a plan so that Joe and Gene could keep me in sight at al times, or at least be able to track my location. 劒e day of the meeting I spent quietly at home reading. I’d resumed my activities at the library. Prior to going to work out at S4 and for most of my adult life, I hadn’t earned enough money to afford subscriptions to al the scienti c journals and periodicals that I wanted to read in order to keep current on latest advances. As I recal , even back then, the wonderful, though not highly technical magazine, Nature, cost nearly twenty-dol ars an issue. Some of the less popular ones, like the Journal of Technical Physics, were somewhat obscure but its peer-reviewed articles were fascinating to me. I struggled with my focus that day, but being in a library had a calming effect on me. But you know you’ve got a lot on your mind when an article on microsecond plasma pulses in MW range can’t hold your attention.

I sat there watching the odd assortment of characters who frequent the library. I suppose that people who don’t live in Las Vegas and only visit the strip don’t real y think about the daily lives of its residents let alone libraries. In the days before the Internet exploded with information that we could access so easily, libraries were stil an interesting gathering place for those

who pursued esoteric as wel as commonplace knowledge.

I thought a bit about the site of our meeting. 瓣e Union Plaza Hotel sat on the site of the former Union Paci c Railroad station. 瓣e hotel stil had a train station as part of its structure. I sought out photos of the older version, built in 1940, and admired its Art Moderne, or Streamline Moderne, façade, a later variation of the Art Deco movement. In the photographs I saw, the station's single story front that faced Main Street looked like the diner that Edward Hopper depicted in his great painting, "Nighthawks." Something always captivated me about that painting: the couple sitting at the counter, the lone man with his back to the viewer, the counterman going about his business. It

sometimes struck me as desperately lonely and at other times hopeful. 瓣ose people had someplace that they could go, even if they didn't speak, some place where they could nd some fel owship. We don't build great cathedrals much anymore and our artists don't tend to depict them in their works the way painters centuries ago once did.

I was in a re ective mood, obviously, while also trying to make sense of my present. I can't say that I ever uttered the words, "Why me?" when it came to my dealings with Naval Intel igence, EG&G, and Dennis as the representative of some larger body of people. I simply accepted what had happened. And in those moments as I ipped through that book depicting some early scenes of Las Vegas and its development, I al owed myself to feel some sense of loss at what had transpired. I'd been privileged to work at S4 and had seen a technological marvel that de ed my complete understanding.

In a way, I was like some pilgrim who traveled to Chartres in France in the thirteenth century and had seen the marvels of the ying buttress and wondered how it was done, and maybe worried that it might al come crashing down on my head, but believed that no, God, in his goodness was holding that high ceiling aloft. Or maybe I was like someone who lived long enough to come to Las Vegas and arrive at the Union Paci c Railroad station aboard a locomotive, powered by a means that was a marvel of its time: internal combustion and electromechanical. 瓣e streamliners of that era were capable of an astounding one hundred miles an hour. We'd made progress to be sure,

and who was to say what a race from a distant galaxy might have been able to accomplish if they'd been around longer or hadn't been around as long, but possessed an intellect superior to our own?

As much as I said that I wanted al of this to be over and wondered how my meeting with Dennis might lead me toward or away from that goal, I was saddened by the end of the opportunity I'd been given. I was sad about the end of my marriage. I don't know if I had any real innocence left to be able to lose it, but I wished that in al that had gone on, there was more time to just simply marvel at it al , to take in the beauty and elegant simplicity of the propulsion system, to appreciate it for what it was and not think of it so much as a problem to be solved but a gift that I could take pleasure in.

I knew that the time for my appointment with Dennis was nearing. 劒e library emitted a signal indicating it was last cal . I slid the periodicals back on their shelves—in de ance of the request to return them to the front desk. I

went home and walked through each of the rooms, thinking a bit about Tracy and our time there together. Sometimes things change, but they aren't always a sign of progress. Before I knew it, it was time to leave. Joe, Gene, and I al climbed into Joe's vehicle, and headed into downtown Vegas. By the time the glittering lights of the hotel were visible, my stomach was in knots. As much as I was concerned for the personal safety of us al , I knew that there were a lot of forms that the "Do you know what we can do to you?" question could take. I could easily imagine having al my nancial records messed with, my education and employment history disappearing, al of which wouldn't be mere inconveniences but could real y damage me and ruin my life. I felt like I'd already lost so much and was going to have to start over in so many ways, that it felt overwhelming.

Stepping into the noisy cacophony of a Vegas casino was a bit of sensory overload, given my exile at John's house and my time at the library. I truly did feel like I was under assault, that the loud noises, the ashing lights, the loud thrum of conversations pierced by sharp laughter produced a physical pain in my head and throughout my body that had me gritting my teeth. As per our plan, I'd entered alone and began to scout for Dennis. At three minute

intervals, Gene and then Joe would enter the casino, chose strategical y advantageous seats at the slot machines, and keep an eye on me. I'd described Dennis to them both, but I didn't want them approaching him. I kept up my reconnoitering the slot room and other parts of the casino, dodging waitresses and patrons in the narrow openings between the games and tables.

After waiting fteen minutes, and wondering if the rules applied about a professor being late to a class applied, I found a staff member to assist me with a request. I asked that someone page Dennis Mariana and ask him to meet his party at the entrance to the blackjack room. Several minutes later, I saw Dennis working his way from the entrance toward where I'd been standing along a sidewal . He was part of a large clump of people trying to make their way deeper into the casino. He looked exactly as he always did. Unsmiling, eyes focused straight ahead, his neat moustache, hair, and erect posture hardly al owing him to blend in with the more casual and relaxed patrons. I walked toward him, made myself very clearly present in front of him, my heart rate climbing and my throat tightening.

Dennis walked right past me, not acknowledging me in the slightest. My eyes darted from side to side and I noticed another man, his presence very

much like Dennis's as he stood stiffly along the wal not far from where I'd previously been standing. I looked at him again, stared at him, and realized that he was one of the security people I'd seen while at S4. It made sense to me that Dennis wasn't going to be alone. I saw that Joe and Gene were both looking in my direction. I tried to point out Dennis to them both, but knew that given the cluster of people moving through the area it was going to hard for them to positively identify which man he was. I walked over to Joe and then to Gene, letting them know what I wanted to do next.

"Gene, I'm going to go in there, into the blackjack room, and I want you to fol ow me. Stay out of sight, but keep an eye on Dennis."

"I saw him, Bob. I spotted a guy who I think matched the description."

"Good. But I want you to be more positive, undeniably positive about the identi cation. I'm going to speak with him, and I need you to witness that, to

have zero doubt in your mind that the man I was talking to was Dennis."

"Got it."

Gene trailed behind me. To my right, I saw Dennis sitting at a table. I inclined my head toward him to let Gene know I'd spotted the guy. I also held up my hand brie y to remind Gene that I didn't want him to approach Dennis at al . It was nearly comical to see Dennis in that environment. He was sandwiched between two curvaceous women who were both enjoying their drinks and the festive atmosphere. I watched Dennis for a minute or so, and he never took his eyes off his cards, a remarkable feat of self-restraint. I circled the blackjack pit and came up behind Dennis. For some reason, by this time whatever anxiety I was feeling seemed to disappear.

劒e dealer eyed me suspiciously. He's seen me circling and looking at the table. I could have easily been eying everyone's cards. A stupid and blatantly obvious cheat, but not one I was working.

"Wel , Dennis, you said you wanted to meet and here I am. What's the deal?" I spoke loud enough to insure that the dealer heard me. He was some six to eight feet away. I saw his expression soften at my words. Dennis didn't react at al . I waited a minute before I said to Dennis, "Dennis, what the hel is going on? What is this shit?"

I stared at the back of Dennis's head, noticed an ingrown hair that had begun to boil the skin in a smal but angry red welt. Aware that creating some kind of scene was not wise, I walked away. Gene joined me on the edge of the pit, edging out from behind a slot machine. Dennis remained in our sightline.

"What the hel was that?" Gene asked.

"I don't know. More bul shit from them, from him."

"What do you want to do?" Gene asked.

"I don't know what we can do. He doesn't want to talk. He hasn't told me where we could meet, nothing."

“Do you want to tail him? Fol ow him to his car? At least get his license number?’

I was so frustrated and let down at that point, so sick of Dennis’s arrogance, that I agreed to that plan, knowing it real y wouldn’t do us one bit of good.

But at least it was something.

Dennis stood up from the table and merged into the crowd. We al moved to fol ow him, but in just a few seconds the crowd swal owed him up.

Gene and I made our way toward the front entrance, near Joe’s position.

“Did you see anybody who looked like Dennis leaving?”

Joe shook his head and shrugged, “Not real y.”

“Not real y or no?” I sounded more agitated than I real y was.

“Sorry, Bob. Nobody that looked like your guy came past.”

“Split up and nd him?” Gene asked.

“Why not?” I said.

We each took off in solo pursuit. I checked al the tables, the bathrooms, even stuck my head inside a bar and a restaurant nearby. Not a single sign of him. After twenty to thirty minutes, I wandered back to the entrance. Gene and Joe eventual y showed up.

“I could use a drink,” Gene said.

“Not here,” I told him.

We drove to a smal tavern nearer my house than the joints along the strip or downtown.

“Why would he do that?” Gene asked. “He asked for the meeting. He had

backup with the other guy."

"I guess we shouldn't assume that the other security guy was with Dennis.

Easy enough to think he was, but not necessarily true."

Joe's face lit up in recognition of what I was suggesting. "So, Dennis says he wants to talk to you personal y. He shows up, sees the same guy you do, now he's thinking that he's being watched. He talks to you, he's in the shit with somebody else above him."

"Could be," I said. I swirled the ice in my glass and held it up to the light,

"劒ings are about as opaque as this."

"I'm not a gambling man when it comes to people's actions, but I'm pretty sure that Dennis wil be back in touch," Gene said.

"I wonder if he's as confused by al of this as you are, Bob," Joe added.

"劒at may be. I've got no evidence to say one way or the other. Until he tel s me it's so, it's al conjecture."

I was de nitely disappointed at how the evening turned out. I knew that there were a lot more unpleasant alternative endings to it, but as with so much of what had gone on, this felt far too incomplete, far too fragmented to real y feel satisfying, far too much like how life general y makes us al feel.

CHAPTER

TEN

IF I WAS HOPING FOR CLOSURE ON THE EXPERIENCES I had with the people who hired me to reverse engineer that propulsion system, including Dennis, I wasn't going to get it. Not then. Not ever.

Unfortunately for me, EG&G, S4, and al the rest of that drama was just one part of the ongoing unravel ing of my life. Even though the failed meeting

with Dennis resulted in the end of the surveil ance teams watching me and my house, I stil took some precautions in the weeks and months to come. Among those was taking different routes when I went to the gym, went to Gene's office, or just continued to do my job processing lm and the pickups and drop-offs that entailed. Even though there were no more incidents of my car being broken into or someone running me off the road and ring shots at my tires, those incidents had already exacted a tol . I felt like I constantly had to have my head on a swivel, and the paranoia those experiences induced contributed to my stress.

In the aftermath of that rst broadcast, Tracy moved out of the house. 劒at made me terribly sad, but I wasn't going to stop her. She'd betrayed me by having an affair, but that didn't mean that I couldn't work toward forgiving her and ultimately get there. 劒ough she moved out, we continued to talk. We decided that we should speak with a counselor and made arrangements to do that. We sat down in his office and he asked us to describe what had been going on and how it was that we ended up in his office. Al went wel for a while, but I could see a cloud of disapproval or disbelief move across his face when Tracy talked about her affair and how my working with alien spacecraft and having government agents watching us al the time contributed to her in delity. We each got a chance to talk about what we hoped to accomplish and what we'd been through. At the end of the session the therapist sat for a few seconds. He bridged his hands in front of himself and leaned back in his chair. 劒en he turned away for a moment to make a few more notes. 劒e only

sound in the room was the scratching of his pen across the page. 劒e light through the window cast a saucer-shaped shadow on the carpet.

He looked back at the two of us after that and said, "劒ere's nothing I can do for the two of you. I don't want to see you again."

Tracy and I looked at one another completely stunned. We got up and slinked out of the room. Once we got inside the car, we sat there for a second before we both burst out laughing.

"We got red," Tracy said. "劒at's not good when your therapist res you."

We didn’t try to nd another counselor, but it eventual y became clear that as I got involved in doing more interviews that whatever damage I’d done to the relationship and what she’d done wasn’t something we both were truly invested in xing. We decided it was best to just go our own ways and not make anything more difficult for the other person.

I’d lost one wife to disease and now a second one to work and in delity. No matter how strong you think you are mental y, or how amicable the parting, a divorce preys on your sense of self and self-worth. A few of the “why me”

moments—why did I have to accept that job, why did she have to have an affair and mess up my chances, and a host of others—brought me pretty low. I understood why some people chose to end their lives. I didn’t feel any of suicidal impulses, but on an intel ectual level, I could understand the desire and the despair that might lead to it.

As much as was possible I tried to resume my normal activities as soon as I could after the initial broadcast George had done. I knew immediately, even in those pre-Internet days, the power of the media. Two days after that rst interview aired, George was on the phone with me.

“Listen, this story is getting picked up around the world. A Japanese station cal ed me. 劻ey want to y you over there and conduct their own interviews with you.”

“Japan,” I said dul y. For an instant the thought appealed to me. I could get away from here and escape everything.

“Yeah. Pretty amazing. What do you think?” George asked, his voice twinged with a mixture of curiosity and trepidation.

“No. Not interested.”

“Mind if I ask why?”

“You’re the investigative journalist. You gure it out.”

George laughed. “飜at’s good. 飜at’s funny.”

At the time, I wouldn’t have been able to tel you if I was joking or not. I was feeling deadened. It was like I was an unplugged electric guitar. Someone could pluck at a string but it produced a pale imitation of the sounds it was capable of producing.

“Wel , Bob, I’m kind of glad to hear that. I mean the exposure is great.

飜at’s one of the reasons why I cal ed.”

I knew he expected me to respond to that some way. Ask what he wanted or something to that effect. I just let the silence linger.

“So, the response here has been great. We’d like to do more interviews with you.”

Again, I didn’t respond. At least not directly.

“I’ve thought about the Japan trip. I think I’d like to do it. Maybe it would be good to get away.”

“飜at’s great. I’l see about the arrangements. What about my offer? More interviews?”

George waited and then l ed in the gaps. To his credit, he didn’t sound exasperated or panicked.

“As you can imagine, some people are a skeptical. Anyone could have made up what you said. We didn’t get into much detail. To be honest, I need to be convinced. I need better evidence. I need to verify some things.”

“Yeah.”

“As I’m sure you know, this story has implications beyond you. Beyond me, for that matter. 飜is is big stuff. Government cover-ups. 飜is is the kind of thing I do. If you’re going to trust anyone about this, I’m your guy.”

We both let the pause go on.

I understood what he was saying. At rst, coming forward was an act of self-preservation. I had only brie y considered what this al meant beyond me being able to get back to my life. I did understand that some people believed in a greater degree of transparency within the government than I did. I had a long history of working with and inside government agencies. I was comfortable with the “need to know” mentality that drove much of the control of information. I’d seen that in action in the private sector as wel .

But with this, I was leaning in a slightly different direction. I didn’t real y see the harm that would come from revealing this information. It sounded to me as if the Russians were already in the know. I thought that people would be receptive to knowing about alien life and technologies. After al , we had these

craft in our possession and it was like they were shot down in some large scale invasion. I stil didn’t know how we got them, and in truth, how didn’t matter.

We had them, so let’s just move on and see how this technology could assist us.

Maybe if I put a bit more pressure on the powers that be, they might be wil ing, or might be forced to, make this information more wel known.

I thought about Sputnik. When we learned the Russians had a space program and then that they’d gotten a man to orbit the Earth before we did, the result proved to be a net positive—a huge net positive—down the line.

Obviously this situation was different, but I thought that the principle stil applied. An open exchange of information could be a good thing. I’d seen rsthand at S4 and in other work what happened when compartmentalization of information took precedence over other considerations: progress slowed. I had a pretty good idea of the weapons potential of this antigravity system. If we had it and others knew we had it, maybe our having such an enormous advantage would be a real game changer. It had been ten years since the Strategic Arms Limitation Talks II treaty had been signed. Talks to end the

Cold War were ongoing, various Soviet Republics had been rising in opposition to Kremlin rule. Momentum seemed to be in our favor, but we could have had a heavy weight to tip the balance in our favor.

I told George that I would think about it and get back to him.

“Don’t think about it too long. I’d rather do this with your cooperation.

News business is tricky. People forget.”

I didn’t tel him that people forget, but that groups and agencies like I had been dealing with most likely didn’t. After George and I spoke, I cal ed John Lear to let him know that I was going to take him up on his offer. I told him that I would meet him for dinner not later than six o’clock that evening. John understood that agreeing to dinner at six o’clock meant I would be staying at his house that night. A minor precaution against eavesdropping, but a necessary one at the time.

I spoke brie y with John about George’s offer to do more interviews. He thought it would be wise to do them. I consulted with a few other friends, but to be honest, by the time I did, my mind was already made up. I was going to go forward with the plan to talk about what I’d seen. I also agreed with something that George told me.

For this story to have any credibility, I needed to step up and al ow myself to be interviewed on camera and have my likeness and name be clearly on

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display. 劒e rst interview I’d been silhouetted and not identi ed. 劒at wasn’t going to pass the test this time. I told him that I would al ow that.

George also said that it was his professional responsibility as a journalist to do more inquiring into my past.

I agreed to that.

George said that he would like to travel with me to Los Alamos to meet some

of the people I worked with and to see where I had worked.

I agreed to that.

George told me that if at any time I was uncomfortable with any of this, up to the moment it was sent out over the air, he'd agree to pul the plug on it.

I heartily agreed with that. In fact, I told him that if he hadn't speci ed that part of the agreement, I wouldn't have agreed to any of the other stipulations.

I also spoke with Gene about the Japan trip and asked him if he would like to join me. In the intervening day since the offer was rst presented, I'd had second thoughts. But Gene seemed to think it was a good idea. At that point, I was easily swayed and was likely just looking for reasons from other people to do or not do many things.

I got another offer that I couldn't refuse. George had contacted the people in Japan to let them know that Gene and I agreed to accept their offer. A few days later, we bought tickets. 劒at same night, I was at home and the phone rang. I picked up and a voice I couldn't identify said, "If you take this trip to Japan you wil never return. Understand?"

He then hung up.

I didn't know if this meant I was stil being fol owed or if my phone line was stil being tapped. Not that either of the two mattered. Gene and I talked it over and since neither of us was al that excited about going in the rst place, we turned in the tickets and didn't go. 劒e Japanese later threatened to sue for the entire cost of their TV special, which I just ignored. I never heard from anyone about it again. I guess it's a re ection of what my state of mind was at the time that the threatening phone cal unnerved me only to the point that I canceled the trip. I didn't pursue any other course of action—no going to the authorities, no going on the record about it and tel ing George.

THE REASON GEORGE WANTED ME TO ACCOMPANY HIM TO Los Alamos was to speed up the process. For him to get the clearances himself, to make al the necessary arrangements would have taken a lot of time. He

wanted to strike, as the saying goes, while the iron was hot. I also met with his boss, the station manager, and both of them struck me as consummate professionals. 劒ey'd agreed to the conditions I'd mandated for the rst interview and everything had gone off as planned.

As much as I was drifting at that point in my life, as much as I was feeling unmoored from the life I'd once led just a few short months before, it was great to have the two of them and my friends in my corner. No matter what happened as a result of the additional exposure, I was comfortable with accepting whatever consequences came my way. I was never going to blame anyone else for being complicit in what happened. I made my choice, and I was going to stick with it. It felt good to be able to trust someone and to trust myself.

劒e trip to Los Alamos was relatively brief. Because I'd worked there and had contracted with them, access to the facility and to the people who could verify my presence there was a relatively easy matter. I took George around and introduced him, showed him places I'd worked and various aspects of the accelerator. George was clearly pleased to see that I hadn't fabricated a bit of my back story. We returned to Las Vegas and George said that he would be in touch to schedule the next taping session. We scheduled it for the last week of May, just prior to Memorial Day.

We lmed in an office at the studio. I decided that since I wasn't going to have my image disguised, I should make myself as presentable as possible. I wore a gray shirt and a matching thin gray tie. I didn't want to dress too businesslike, so I wore a pair of jeans and white running shoes. Gene didn't prepare me ahead of time with a list of questions and that was ne with me.

We talked at length, but I knew that he was going to have to edit it al down to about ninety seconds for broadcast. I wasn't nervous. Blocking out the camera operator and the sound person wasn't easy. We were in a fairly tight space, but I kept reminding myself that I was having a conversation with George and no one else. He was somebody I trusted and al I had to do was answer honestly and talk to George.

I stuck around the studio while George went into another part of the facility to do his editing. I'm not sure why, but I wanted to be there in person

when that evening's news, with my interview included, went out over the airwaves. As time went on, I thought more and more about what I was doing. I was kind of like a groom sitting in a church office while his bride and everybody else bustled around making the last preparations before a wedding.

Al of them were occupied with doing something, but al I could do was sit there and think. I started off picking up a pencil and drumming it on the table top while considering everything I had done and what this new revelation might mean for my future. I had no idea real y of how far-reaching the consequences might be.

I didn't believe I'd be in any real physical harm; that was the initial thought I'd had in coming forward, that I should do this and protect myself. I wondered a bit about my reputation in Las Vegas and dismissed that as a concern pretty quickly. Las Vegas was a place where many people led a transient existence. 劒ey came here with some kind of dream or ideal or last-resort mentality. It was kind of like the gambling that drew a lot of people to the place. You started out with high hopes, went bust, and limped home.

I was concerned about making a living beyond photo processing. I'd signed up with EG&G hoping to get back into the scienti c community. I wasn't sure how I'd be perceived if I came forward. I'd damaged my chances at getting the security clearance I'd needed to work at S4. But what about at other places, like Los Alamos? What about in the private sector? 劒at was a real unknown.

劒at concerned me. I knew that I'd take a kind of fuck-it-al attitude in the wake of Tracy and the rest of it, but I had to be practical. I was gutted, that was for sure, but there was some instinct inside of me, some sense of survivorship that kept nagging at me. No, I wasn't going to kil myself, but was I doing something that would cripple me in a way? Was I committing some act of self-sabotage? Was I looking for an easy way out, a way to later explain whatever state of failure I'd entered into?

I had been pacing for a good amount of time as I waited for the countdown to air time. 劒ere was something inside me that hated the idea of having Dennis and the rest of them, whoever they were, win. I thought that maybe by coming forward in the manner I had, I'd done just that—beaten them. But in reality, that wasn't likely to be the case. I was pretty sure that as I sat there in that room, there was someone else out at the facility l ing out the same paperwork I had, submitting to the same physical, getting introduced to Barry or some other version of Barry. 劒e golf bal would stil be hitting the ceiling

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and raining down bits of acoustical tile. 劒e high performance tests would stil be going on every Wednesday night.

I wouldn't be a part of any of that. What would I be a part of? I felt a gnawing in my stomach and envisioned a gaping black hole that was my future.

Someone knocked at the door.

"We're about to go with it," someone I hadn't met before told me. "If you'l fol ow me."

We walked through the aisles of the newsroom along rows of desks and half-wal s. I spotted George a few yards ahead of me. He carried a large format videocassette in his hand. I took off after him.

"George! No! You can't!" I yel ed.

"We have to go with this," George said. His eyes darted from side to side and he'd edged around a le cabinet and a potted plant wobbled unsteadily.

"You said up to the last second just say the word."

George was stil on the move. I accelerated and caught him around the waist and chest and tackled him.

"I'm saying the word, George. NO!"

We rol ed around on the oor, George holding the tape just outside my grasp. I looked up and saw a few faces staring down at us, though no one stepped in to intervene.

“We have a deal,” I said, sounding very much like a pre-pubescent boy shouting at his older brother.

George scrambled to his feet.

“I’m doing the right thing, Bob. You know. Cold feet is al . 劒is is going to be okay.”

With that, he went into the studio and I sat on the oor with my head cradled in my hands and my knees drawn up, wondering not for the rst time or the last, “What have I done?”

IN THE LAST TWENTY-SEVEN YEARS, I’VE ASKED MYSELF THAT question many, many times. Unlike a lot of people who’ve lived through a real y rough period and come out on the other side who say, “If I had to do it over again, I wouldn’t change a thing,” I would.

I wouldn’t have come forward. I should have probably just waited things out after learning about Tracy’s affair. I would have been more patient and lived with the hope that once that matter was al settled I could have gone to work at S4 ful time. I had a once-in-a-lifetime opportunity to work at the forefront of science, and I pissed it away. Sure, there are the ethical implications of what was going on out there, but at heart, I’m a scientist. I seek knowledge and understanding. Al that’s been left in the wake of my time at S4

is other people’s doubts and uncertainties about me, and about the program there. As a scientist, on one level you have to accept that there’s going to be uncertainty, that your theories and ndings could always eventual y be proven to be less than one hundred percent certain. Simultaneously, you also have to believe that you’ve cracked the code, solved the riddle, advanced human understanding.

At S4, I didn’t do any of that.

I have to live with that regret and a bunch of others as wel .

飀is is no fairy tale. We al didn’t live happily ever after.

A lot of innocent people got hurt as a result of me stepping forward. People lost security clearances, jobs, possible futures because of their association with me and my revealing to them what I did. 飀at’s hard to deal with, but is in no way as hard as the consequences they had to face. Over the years, I’ve tried to do what I can to make amends, but words fal short and gestures fail.

As for me, I picked up the pieces eventual y. Over the long haul, things did get better. I’ve spoken a few times at conferences and done some interviews.

I’ve had Hol ywood lm and TV producers contact me. In the scripts they’ve written, they’ve tried to show me as some kind of action hero, leaping onto the hoods of cars escaping the bad guys. I’m no action hero. I wasn’t then and I’m certainly not one now. I’m no kind of hero.

I’ve settled into a quiet life running a scienti c supply company. I can’t do science anymore now that my reputation has turned to crap. I’ve tried sending out resumes but they produce no results, not even a polite decline, just silence, the deep silence of space.

I chose to come forward again and hoped to set the record straight by writing this. I didn’t seek someone out; he sought me. I knew that this was going to be a part of a larger overarching project, and I liked that idea. I was just one smal cog in a larger machine at S4 and S4 is part of a larger story as

wel . I can’t, and won’t comment on that because it is not something I witnessed or experienced myself.

I’m a modest guy with modest ambitions. Al I’ve ever done in interviews and appearances is to comment on and to relate what I know and I what I did.

I see no reason to change that now.

I imagine that anyone caught up in events that feel larger than themselves

feels the impulse to create a story that is in ways as large as the forces that are acting on them. I guess that’s a part of physics. But I know that our understanding of the nature of the universe is, to put it mildly, incomplete.

Maybe there’s some comfort in knowing that this story is over. Maybe some wil take comfort in feeling that there are some questions yet to be answered.

飆at’s life.

In the end, though, I was rewarded for my patience and my perseverance.

I’m married now and have a lovely wife and step-grandkids. None of them know me as the Area 51 Guy. And that’s just ne with me.

Dreamland: An Autobiography by Bob Lazar

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